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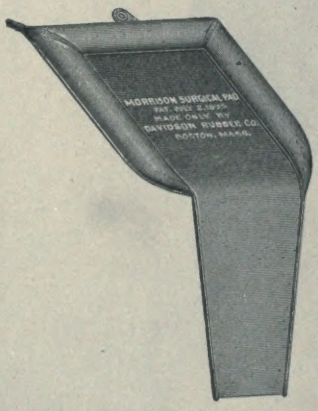

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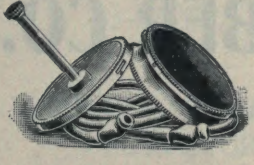

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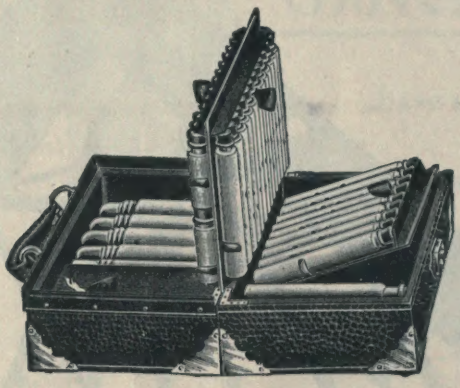

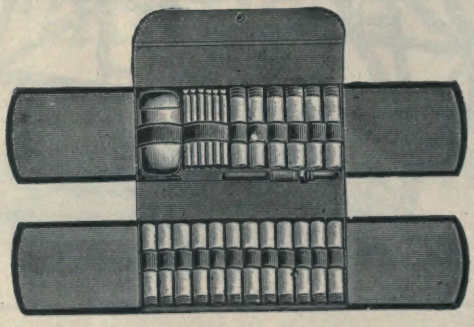

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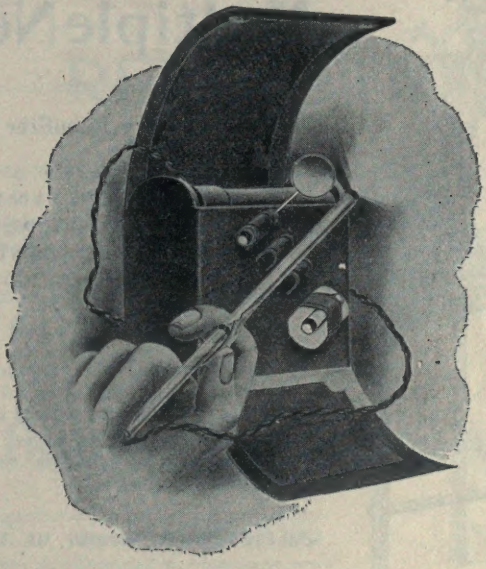

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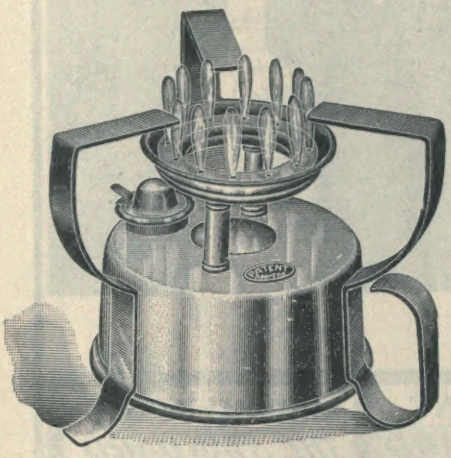

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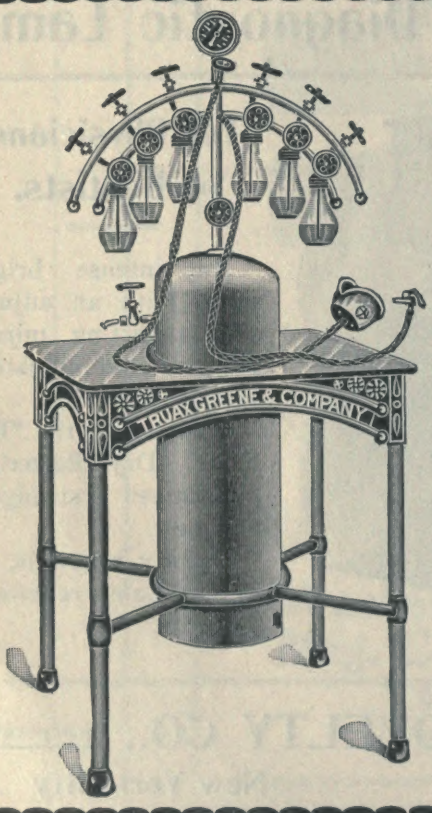

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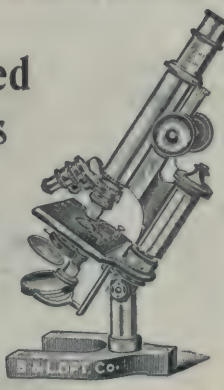

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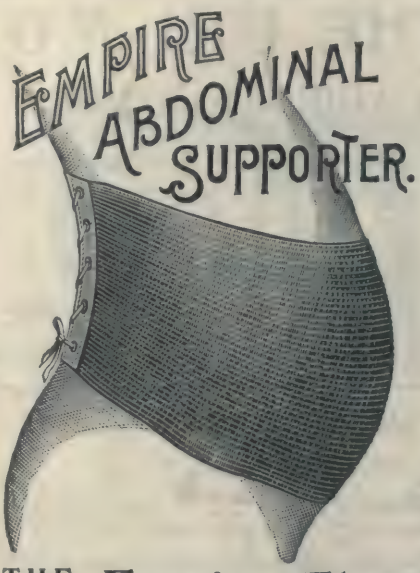

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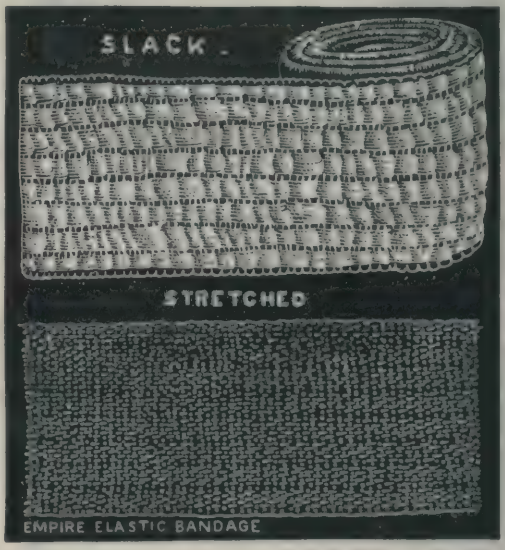

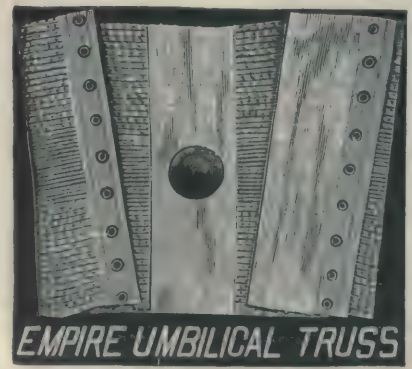

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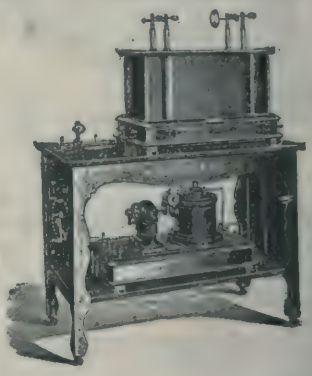

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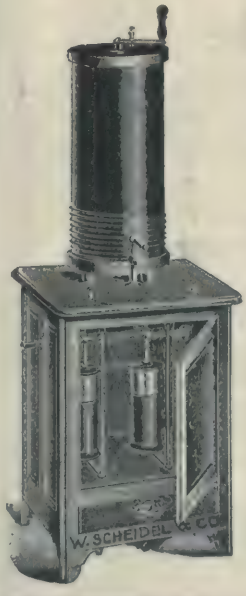

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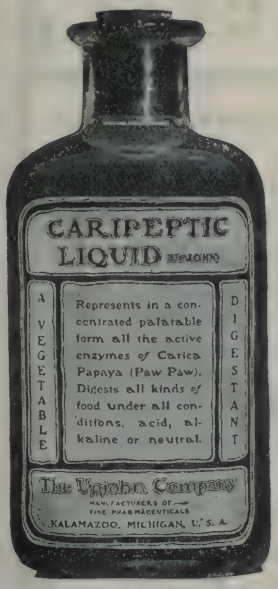
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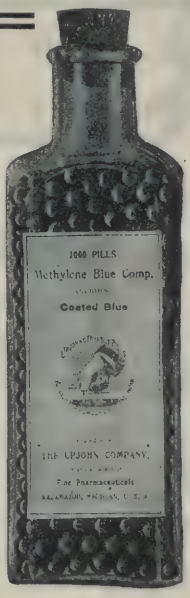

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OPERATION OF TOTAL EXTIRPATION OF THE PROSTATE IN ITS CAPSULE.

By J. B. KENNEDY, M. D.,
Detroit, Mich.

"Enlargement of the prostate" is a term that is and has been very familiar for years, not only to surgeons but also to a large number of laymen above the age of 50 years who have been sufferers from this distressing and painful malady. It is estimated from statistics collected by Sir Henry Thompson that about 33 per cent. of all men beyond fifty-five years of age are subject to enlargement of the prostate and about 5 per cent. suffer from symptoms; and it is because of the frequent occurrence of this condition that surgeons have from time to time introduced and performed various operations for its relief. Among the more common operations for the relief of the distressing symptoms caused by enlargement of the prostate gland, the following may be mentioned:

1. Bottinin's operation, Division of the prostatic obstruction by the galvanocautery.

2. Removal of median growth through a perineal opening into the urethra by means of forceps or instruments constructed to punch out a portion of the growth.

3. Suprapubic prostatectomy—usually known as McGill's operation, because he is one of its principal advocates.

5. Perineal prostatectomy by Nicoll's method.

6. Perineal prostatectomy by Freyer's method.

All of these operations have been performed with a view to removing the obstructing portion of the enlarged gland and have been termed "radical operations." On the other hand the operations of castration and vasectomy have been practised for the purpose of inducing atrophy of the prostate.

Although all of these operations have met with some success, it will, it seems to me, be admitted by even their most ardent advocates that none of them has been satisfactory. Had there been any one operation or procedure offered which left the patient in good health and entirely relieved of the distressing symptoms, it would certainly have been adopted as *the* operation.

It is not my intention to discuss at length all of the operations above enumerated, but I will refer to them as a whole and consider why they have been so largely unsuccessful. In each case the surgeon has understood the anatomical structure of the prostate gland as it is described in the standard textbooks on anatomy and with such an understanding it would be impossible to entirely or radically remove the gland, without doing irreparable injury to the uretha. Consequently none of these operations should be termed "radical," inasmuch as enucleation of the gland has been attempted by none of them. It has remained for Freyer to discover that the anatomy of the prostate has been misunderstood and that it is consequently

possible and indeed comparatively simple to extirpate the prostate in its capsule, a procedure which has heretofore seemed anatomically impossible.

When Freyer introduced his new operation he encountered criticism on all sides. The best surgeons in England attacked his method in the journals and elsewhere, but before I left London last spring he had convinced his most bitter opponents, and men who had previously severely criticized his undertaking, sent him written apologies saying that his operation for the extirpation of the prostate in its capsule is a revelation in prostatic surgery.

In order to explain somewhat in detail Freyer's conception of the anatomy of the prostate and his operation for its total extirpation, allow me to quote from his work on this subject:

"The body is in reality composed of twin organs, of purely sexual function, which in some of the lower animals remain separate and distinct throughout life, as they do in the human male during the first four months of foetal life. After that period they approach each other, and their inner aspects become agglutinated together, except along the course of the urethra, which they envelop in their embrace. But the two glandular organs constituting the two lateral lobes of the prostate, though welded together, as it were, remain, so far as their secreting substance and functions are concerned, practically as distinct as the testes, their respective gland-ducts opening into the urethra on either side of the *veru montanum*. Each of these two glandular bodies is enveloped by a thin, strong, fibrous capsule. These latter, except those portions of them that cover the opposing aspects of the glandular bodies, or lobes, which dip inwards and disappear in the substance of the prostate, together constitute the true capsule of the prostate as a whole. This extends over the greater portion of that organ, being deficient only along the upper and lower commissures, or bridges of tissue that unite the lateral lobes above and below the urethra, thus filling the gaps between them. (For descriptive purposes the prostate is supposed to lie with its rectal aspect downwards.)

"The urethra, accompanied by its surrounding structures, namely, its longitudinal and circular coats of muscle, continued forward from the bladder, its fibrous and elastic tissues, its vessels and nerves, passes forward between, and is embraced by, the inner aspects of the two glands. The ejaculatory ducts enter the protate close together, in an interlobular depression, at the lower part of its posterior aspect, each coursing along the inner surface of the corresponding lobe. They do not penetrate the capsules of the lobes, but pass forward in the interlobular tissue, to open into the urethra.

"The prostate, thus constituted and enveloped by its true capsule, is further encased by a second capsule, or sheath, formed from the pelvic fascia, numerous connecting bands passing between the two. Between these two capsules lies the prostatic plexus of veins, particularly in front (above) and on the sides of the prostate; and these veins, in subjects of enlarged prostate, are frequently of enormous size. The larger branches of arteries also lie between the true capsule and the sheath, numerous small branches passing from them through the capsule for the supply of the prostatic substance.

"In most, if not in all, cases of enlargement of the prostate the overgrowth is of adenomatous character, numerous encapsuled tumors being found embedded within the substance of the lobes, and sometimes protruding from their surfaces in the form of polypoid outgrowths, which, however, are invariably enclosed

within the true capsule, which is pushed before them.

"Now, as the lateral lobes enlarge, they bulge out and have a tendency, *each contained within its own capsule,* to become more defined and isolated, thus recalling their separate condition in early foetal life. They separate and shake themselves more or less loose along the commissures, or bridges of tissue, which in the normal prostate unite them above and below the urethra. And in the course of this change the urethra, with its accompanying structures, is pushed towards the surface of least resistance, generally upwards.

"In the removal of the prostate by the method under consideration, whether as a whole or in separate lobes, the organ is enucleated in its capsule from the surrounding sheath, and then stripped off the urethra, which, with its enveloping tissues, is left intact.

"To accomplish this, suprapubic cystotomy is first performed, and the catheter, employed for inflation of the bladder, left in the urethra. The forefinger of the left hand is then introduced through the wound, and a general survey of the bladder is made. The mucous membrane over the most prominent part of one lateral lobe, or over the so-called middle lobe, if there be one, is snipped by scissors, or torn through by the sharpened finger nail. The forefinger of the other hand is introduced into the rectum, to push the prostate prominently into the bladder and to keep it steady in this position. The mucous membrane is gradually detatched by the fingernail from tne tumor, or prominent portion of the prostate in the bladder. It will be found that this portion of the prostate is covered merely by mucous membrane of the bladder, having, in its gradual enlargement backwards into that viscus, burst through its sheath in this direction, so that when the mucous membrane is detached the true capsule of the prostate is at once reached. Keeping the finger-point in close contact with the capsule of the prostate, the enucleation of the organ from the enveloping sheath is effected by pushing the finger in succession beneath, outside, and above one lateral lobe, separating the sheath from the capsule. The finger is then swept to the inner side of the lobe, detaching this from the urethra, which is pushed upwards towards the symphysis, between the lateral lobes, which will, as a rule, have separated along their superior commissure during the manipulations. The other lobe is treated in the same manner. The finger is then pushed well forward, and the anterior surface of the prostate is peeled off the triangular ligament. By aid of the finger in the rectum the prostate is tilted to one side, beneath the urethra, and pushed into the cavity of the bladder, whence it is delivered by forceps. Sometimes the lateral lobes become detached along both upper and lower commissures, and come away separately.

"There is, as a rule, very little bleeding from the operation, and this is easily controlled by irrigation with hot lotion through the catheter. A stout drainage-tube is placed and kept in the suprapubic wound for two or three days, after which the bladder is irrigated daily by a weak antiseptic lotion till the suprapubic wound is nearly closed."

Even in the face of this description the operation may be remarkable, improbable, and to some perhaps impossible, as it seemed to me until I saw Mr. Freyer perform his 35th operation in the manner described. After I had seen the operation performed and had learned that of the thirty-five thus performed, thirty-three had been successful, I became a convert to Freyer's method. It was during my sojourn in England last winter that I had the opportunity of witnessing this operation at St. Peter's Hospital, London,

and I then and there decided to adopt it in my practice upon my return to Detroit.

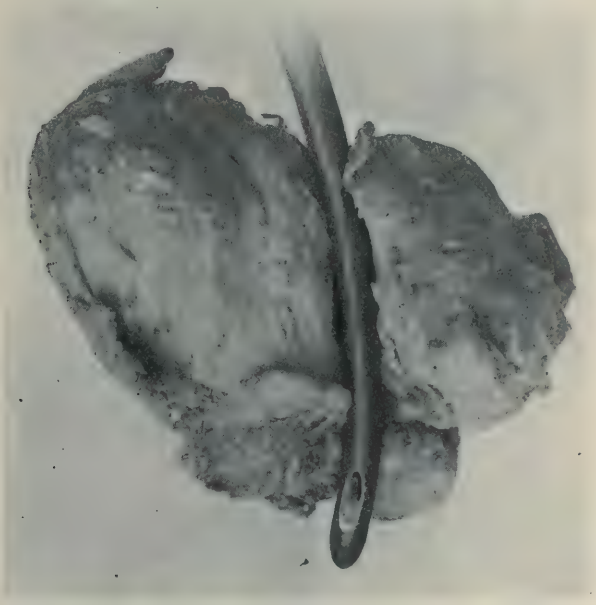
Since my return from Europe and within the past four months, this operation has been performed eight times at Grace Hospital. Dr. H. L. Obetz and myself have together operated upon six patients, Dr. James I. Murray and myself upon one, and Dr. S. H. Knight and myself upon one. Two of the patients recently operated upon are still at the hospital making uneventful recoveries. Six have been discharged completely cured and the oldest 87. All had suffered from severe prostatic symptoms, and had led catheter lives for years. It is interesting perfect bladder control. The youngest man operated upon was 58 years of age to note that calculi were found in four of these cases which had not been discovered until the operation. The following cases operated upon by Dr. Obetz and myself are fairly indicative of some of the types encountered in practice:

Case 1. This gentleman, age 77, had of all prostatic symptoms, and having suffered from prostatic symptoms for twelve years and had led a complete catheter life for six years, having to ecavuate the bladder at least hourly day and night.

On May 22 I removed a large fibrocystic tumor of the right testicle, which had been causing him much anxiety. June 3 the operation for total extirpation of the prostate in its capsule was performed. After he was completely under the chloroform the rectum was first well dilated to permit of easy manipulation of the index finger of the left hand in pushing the prostate well up in the bladder. Several ounces of foetid urine, which contained much pus and albumin, were drawn off. The bladder was then irrigated with a weak boric acid solution, 10 ounces of the solution being left in the bladder to distend it. The number 12 silver catheter used in irrigating was allowed to remain in the bladder to serve as a guide and permit of constant irrigation after the bladder had been opened suprapubically. Upon opening the bladder by

Case I.

the suprapubic route the lateral lobes of the prostate were found projecting into it, while a so-called middle lobe the size of a marble and pedunculated, acting as a valve to the inner orifice of the urethra, was found. It was impossible to completely separate the superior commissure in this case owing to a uniform circular projection, surrounding the internal orifice of the urethra like a collar. This variety is described by Brodie who says it is not infrequently found. The gland therefore had to be drawn off the urethra. tubs was removed at end of forty-eight hours and the bladder irrigated daily through a large rubber catheter passed into the urethra, the fluid flowing out by the suprapubic wound. Six days after the operation the patient passed about four ounces of urine through the urethra. He left the hospital at the end of two weeks; at the end of three weeks he could project a stream five feet and at the end of four weeks the suprabubic wound was completely closed and he was able to do some light work in his garden. On



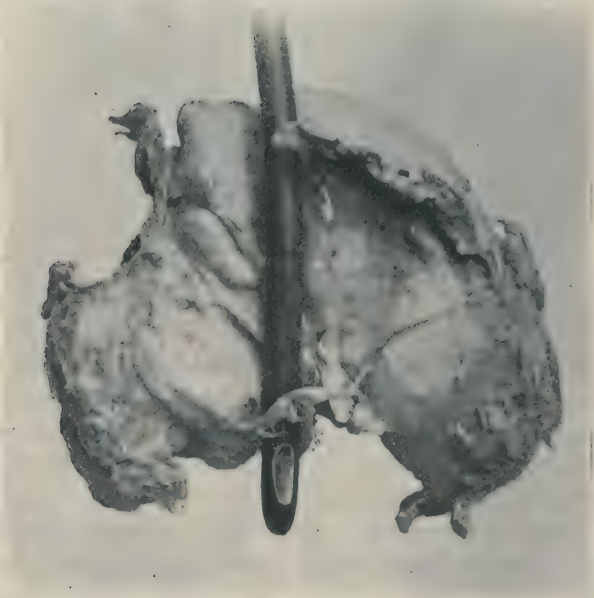
Case II.

which was severed at the neck of the bladder, just as a bead is drawn off a string. (The catheter in this and other figures indicates position occupied by urethra). The bleeding was very slight and was rapidly controlled by the hot boric acid solution. After the removal of the gland the second capsule formed from the pelvic fascia could be easily felt contracting down upon the urethra. A large rubber drainage tube was placed in the suprapubic wound; no sutures or ligatures were used. The rubber drainage September 15, examination showed that he had no residual urine and he informed me he could retain and pass his urine naturally as well as he ever did in his life.

Case 2. This gentleman, aged 61, had had the perineal operation performed one year ago with no improvement. When admitted to the hospital his urine contained pus, blood and albumen. Operation performed June 10, the details of which, in this case and subsequent cases were the same as in case one, with the

exception that complete separation of the superior commissure was easily done. A phosphatic stone about the size of a small hen's egg was found in the bladder. Gland easily enucleated; June 18 the patient sat up and urinated voluntarily several ounces of urine, the first time he had done so in a year. On July 4 the suprapubic wound was completely closed, and he was able to pass urine naturally and with perfect ease through the urethra. The urine now normal in every respect.

Case III.

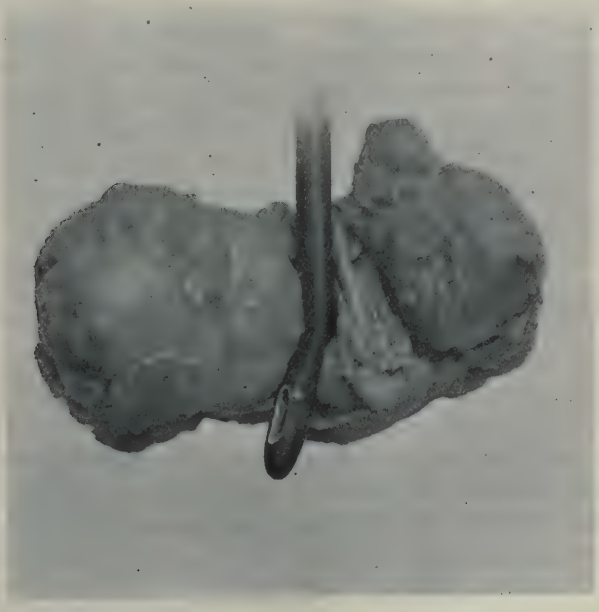


Case IV.

This man has increased several pounds in weight since the operation. Discharged from the hospital July 4.

Case 3. This patient, age 69, was admitted to the hospital July 2 with a temperature of 100 and pulse 90. Urinalysis showed one-tenth per cent. of albumin and considerable pus. He had led a complete catheter life for two years and a half. Operation performed July 3. Twelve small phosphatic calculi were found in the bladder. The time occupied in extirpating the gland was less than six minutes. July 11 he urinated through the urethra voluntarily, the amount of urine increasing daily until July 31, when the suprapubic wound was completely closed and he passed his urine through the urethra with perfect ease. He was discharged cured August 8.

Case 4. This man, age 58, had vasectomy performed some years ago which gave him no relief. He had passed urine exclusively by the catheter for several years. Operation performed July 18. Two hours after the operation the patient showed symptoms of collapse, but soon rallied when strychnine, brandy and oxygen were given. Seven days after the operation he voluntarily passed two ounces of urine through the urethra and the amount increased daily until the tenth of August, when the suprapubic wound was entirely closed. From that time on he had as complete control over his bladder as he ever had in his life and he now declares himself in perfect health. He was discharged from the hospital August 15.



Case V.

Case 5. Age 58. Urinalysis showed presence of pus and albumin. Had led complete catheter life for several years. Operation performed July 27. The actual time occupied in operating was seven minutes. August 4 he voluntarily passed a small quantity of urine through the urethra. On August 20 the suprapubic wound was closed and he passed his urine with perfect ease through the urethra. Discharged from the hospital completely cured September 9.

The eighth case, operated upon by Dr. Knight and myself, is interesting because

of the advanced age of the patient—87 years. Notwithstanding his age and feeble condition, he stood the operation remarkably well, and the case is running as even a course as any of the previous cases. He is still at Grace Hospital. With the exception of case 4 there were no alarming symptoms following the operation in any of these cases. The temperature in no case was at any time above 100.

The small amount of hæmorrhage and the rapidity with which this operation can be performed must certainly appear as important factors in operating upon patients well advanced in years with health seriously impaired by years of constant suffering, and want of proper rest. I again quote from Freyer: "When we reflect that a very large proportion of the male population beyond 50 years of age suffer from this distressing malady, and that the majority of these are eventually carried off by the disease, after a life of misery, and frequently of agony, we can imagine the blessing to humanity of any operation that effects a radical cure. I think I shall not be accused of exaggeration when I state that all previous so-called methods of radical cure of enlarged prostate are unsatisfactory, and that catheterism, though the least objectionable mode of treatment in the vast majority of cases, is liable sooner or later to terminate in cystitis or other dangerous complication. I submit that the results obtained in these cases of total extirpation of the enlarged prostate encourage us in the hope that we have at last arrived at a rational method of dealing with this painful and frequently fatal malady."

410 Washington Arcade.

CONCLUSIONS FROM FIFTY-ONE INTUBATED FATAL CASES OF LARYNGEAL DIPHTHERIA.*

By B. R. SHURLY, M. D.,
Detroit, Mich.

A study of medical literature and a glance at a medical society program reveal the fact that the majority of subjects presented are reported entirely to emphasize successful results. From this standpoint an author usually advocates most forcibly some particular line of treatment that has been followed without fatal complications. The unsuccessful cases and the mortality side of medicine and surgery are given such meagre consideration in the profession that during these many years of scientific work in our local colleges and hospitals little attention has been given practically in our own city to gross pathology. We have no morgue, no post mortem amphitheater, and no classified scientific reports from our county physicians, who conduct most of the autopsies performed here. In fact scientific work in this field must be limited until adequate facilities are supplied. Only two post mortems were obtained in this series of cases and these were performed under such conditions in private houses that the most enthusiastic searcher after pathological truths would turn from his work and wait for other opportunities. It is with a full realization of these scientific deficiencies that I report this series of fatal cases, but with a belief that the study of why our patient dies is sometimes of much greater value than why he lives. Four years ago the writer reported a series of 200 intubations with fifty-one deaths, and according to the usual custom the most brilliant recoveries were selected as special cases for report. While today these cases stand

*Read before the Wayne County Medical Society, September 24, 1903.

on record as good results in this line of work, these fatal cases are a summary of experience of untold value to the practitioner. Each fatal result teaches its lesson and proves a scientific contribution to the physician who battles against disease.

Given a disease with a definite constant micro-organism as its cause—the Klebs-Loeffler bacillus—and an absolutely certain specific remedy when administered in the proper dosage at the proper time; why were there fatal cases of this disease to the number of 526 in the state of Michigan in the year 1900 and why has the city of Detroit a mortality of over 20 to 25 per cent.? This problem can be solved with the exactness of mathematics. For demonstration purposes, allow me to submit the first series of thirty-one fatal intubations occuring in 100 cases. Of these, thirteen were *in extremis* at the time of operation. The causes of death are divided as follows: Broncho-pneumonia, 5; Broncho-pneumonia and sepsis, 6; Broncho-pneumonia, extension of membrane and sepsis, 15; Broncho-pneumonia, extension of membrane and nephritis, 2; Heart paralysis, 3. (One of these occured two weeks after the removal of the tube.) The mortality under three years was 49 per cent., while over three years, it was 19.6 per cent. Eight of these fatal cases showed a diphtheritic laryngitis engrafted on a laryngilaryngitis engrafted on a laryngitis of tis of measles, with five deaths. Thirteen fatal out of thirty-eight city cases operated gave a mortality of 34 per cent. By way of comparison let us examine the second series of 100 operations with twenty deaths. Here the mortality under three years fell to 29.2 per cent., while over three years it was only 12.1 per cent., and among city cases the mortality in thirty-one operations was five or 16.1 per cent. Intubation in acute diphtheric stenosis is absolutely unnecessary and preventable. Why were these cases intubated? A careful consideration and study of the reasons and factors operating in the fatal termination of these fifty-one cases have proved exceedingly valuable in subsequent operations. Intubation, we must remember, in the hands of the conscientious surgeon, is performed only when other methods have failed. The fatal cases were frequently seen *in extremis*. In the first series no antitoxin was given in ninety cases until the operation was performed, while in the second series seventy-two cases progressed to operative interference without the serum. It is not sufficiently realized that the question of a few hours in the use of our specific remedy may turn the tide against us. Each fatal case of laryngeal diphtheria demonstrates with mathematic exactness that the patient died of extension of the membrane or sepsis and the sequelæ. Both of these conditions are absolutely preventable by administering a curative dose of serum on the first day of the disease. Fatal broncho-pneumonia, adenitis, nephritis and cardiac paralysis are attending phenomena of sepsis and are usually unnecessary if the case is treated without delay. In this series of fifty-one fatalities no two deaths occured in one family, although many severe cases in the same house were frequently under treatment after the first visit. Prophylactic dosage in my experience has been uniformly successful but it has not received the extensive use its wonderful efficiency deserves. Many of my cases were lost from insufficient doses. In a personal conversation with Prof. Adolph Baginski of Berlin, one of the pioneers in the use of Behring's serum, he informed me that malignant and laryngeal cases are given an initial dose of 1,000 units and the serum has practically eradicated diphtheria from Berlin. Our cases show that at least 2,600 units are required for every laryngeal case, and this should be repeated in six

to twelve hours until a favorable reaction is obtained. The necessity for a reliable preparation is so apparent that the manufacture of this product should be under government control; and until such time it is of great importance to use only a thoroughly tested serum.

My notes fail to record the number of cases suffering from enlarged tonsils and adenoids, but the observations are exceedingly numerous. Second only in importance to the delay of physicians and parents in providing an early dose of antitoxin in diphtheria should be placed the condition of lymphatism. There can be no more forcible argument offered for the surgical removal of these hypertrophied tonsillar and adenoid glands than the greatly increased number of complications and consequent mortality resulting from them. The true significance of these factors in a fatal issue of the disease is too frequently overlooked. The hyperæmic tissue and engorged lymphatics furnish a rapid filter for the virulent toxins and the fatal processes are extremely rapid in this class of patients. In these cases especially a very large initial dose of antitoxin is indicated.

No sick child of any age has received intelligent professional care unless the throat has been examined at the first visit. This precaution would save many lives, especially among children from one to three years of age. The mothers should be instructed to train their children in this regard and to look with suspicion upon an exudate of any variety. The Board of Health has not enforced the rigid quarantine this disease requires. This disease in Michigan had 529 fatalities reported in 1900 while small-pox, that terrible scourge that demands the immediate services of the health officer, the removal of our patient to the pest house and vaccination of all exposed, with the usual attending family panic, claimed nine deaths in Michigan during the same year. The same expenditure of zeal, quarantine and the prophylactic use of antitoxin would reduce the mortality of diphtheria at least one-half. When a case of diphtheria is reported (and some are not reported) it should be the duty of the city to provide immunization for all those exposed, and especially children under five years of age. In most of these fatal cases reported the source of infection could be traced. Three cases were intubated in different families who successively occupied the same house; eight cases, four of which were fatal, came under my observation in an infected Garfield Ave. house occupied by four Polish families. The cases were of the laryngeal variety, illustrating the peculiar contagiousness of the disease in this special type. Negligence and lack of care among the ignorant classes of our city must continue to operate as important factors in a fatal result and these conditions are necessarily beyond our professional control. The opposition to the use of antitoxin and the tube has given way before the successful results and it is rare indeed at the present time to meet antagonism. It would be unfair to discus this subject without due reference to the accidental deaths that resulted directly from the treatment. Antitoxin per se can not be held responsible for a single death in this series; insufficient dosage, however, will explain the great majority of them. To the accidents of operation I would assign three deaths which occurred early in my experience. One of these resulted from the breaking of an obturator. The child had been doing well for some hours, when the tube was coughed out. In an attempt to replace it some hours later the only obturator I possessed with the usual small set of tubes broke at the hinge-joint, and I was unable to introduce the tube with the extractor. Before another was obtained the child died. This sad experience taught me the

necessity for a large supply of tubes and a special case carrying twenty-eight tubes (4 sets) was ordered. Two cases died suddenly from membrane plugging the tube and those in attendance were unable to remove it. These deaths were influenced also by lack of experience and poor judgment. Where the membrane is below the tube and this possible danger is apparent the string should be left attached to the tube for some hours. One fatal result occurred from the negligence of the nurse, who slept through the night. When she awoke the child had been dead some hours. It had coughed out the tube and a fatal asphyxia developed. The question of secondary tracheotomy is always to be considered and in selected cases the recoveries are less than 5 per cent. In private practice it is usually impossible to save the little patient by this method and most authorities discourage the procedure. Successive intubations will ordinarily accomplish all that is possible. Secondary tracheotomy is indicated, however, in cases that show persistent extension of the membrane without a severe degree of sepsis. The location of the membrane is of the greatest importance in considering the prognosis. Of these operated cases, 158 showed membrane engrafted on other regions in addition to the larynx. Naso-pharyngeal involvement demands large doses because of the increased danger of rapid absorption of toxins. The ascending type with primary infection of the larynx seems less fatal than the descending variety.

In conclusion, allow me to again emphasize the extreme importance of the early administration of large doses of antitoxin and the immunization of those exposed. A fatal error has frequently come under my observation, that of mistaking the meaning of the classification, Double x serum. Double x serum refers to twice the bulk or concentration of the product, but no increase in antitoxic value. In other words, 2,000 units single x are identical in curative value with 2,000 units double x. The majority of physicians who have used antitoxin occasionally fall into the serious and fatal error of believing one to be twice the value of the other. It would seem necessary to request the laboratories manufacturing antitoxin to make the directions and title of the product so clear that no possible confusion can arise. Under the present system the mistake is leading to fatal results. To summarize the views mentioned above and to enumerate according to importance the chief reasons why these cases were fatal I should make the following classification: I. Delay in giving a large initial dose of antitoxin for which there are two causes; Delay in calling a physician; Delay by the physician. II. Insufficient dosage at later intervals. III. The delay in intubation. IV. The presence of hypertrophied tonsils and adenoids. V. Lack of proper nursing. It is with the belief that the details of the therapeutic action of antitoxin and the dosage required in each case are not given sufficient attention, and the hope that larger quantities of serum will be used that this subject is presented for your consideration. The fatal results from the disease must then diminish to at least a 5 per cent. mortality and intubation will be given its proper place among the rare methods of operative interference.

32 Adams Avenue West.

A CASE OF GUNSHOT WOUND OF THE BRAIN.

By HAL. C. WYMAN, M. S., M. D., Professor of Surgery, Michigan College of Medicine and and Surgery, Detroit, Mich.

In April Mr. S., aged 24 years, a barkeeper, was admitted to Emergency Hospital with a fresh gunshot wound of the right temple. The ball (a 44-calibre) had crashed into the skull at a point one-half inch above the right zygomatic arch and one inch behind the external angular pro-

*Written for the Detroit Medical Journal.

cess of the frontal bone. The man was unconscious and bleeding freely from the wound. There were no unilateral symptoms, except that the right pupil was enlarged. There was a long linear fracture running from the frontal bone about one inch above the orbital process and somewhere through the coronal suture so that the included fragment was lifted up and lapped about one fourth of an inch of the frontal bone. Prostration was extreme; there was no wound of exit. He was in the service of Prof. E. B. Smith.

A few days after receiving the injury he became conscious, but at the same time exhibited paralysis of the entire left side of his body. Fever developed and Dr. Smith found it necessary to cut through the scalp into the fracture where it ran into the left temporal ridge near its summit and evacuate a large quantity of pus. After this, compression symptoms, which had come on gradually with the temperature, began to vanish and his general health improved so that he was soon out of bed and able to leave the hospital. His left side, however, continued weak and he could not approximate thumb and fingers of his left hand normally. There was numbness of these organs, and starting in them, came a peculiar, light, airy feeling which swept through his whole body, culminating in fits of unconsciousness, during which his friends said he convulsed violently. He came under my service at Emergency August 1, 1903.

He had been having epileptic fits every day for six weeks, and showed some mental enfeeblement which may have been due to the use of bromides, which were prescribed by his family physician. They had, however, no good effect in cutting down the convulsions. I was told by Dr. E. G. Willson and Medical Student Van Baalen that he was surely progressing from bad to worse. We had a number of skiagraphs made with a view to locating the ball, and Prof. Campbell made a careful search of the brain and the skull with the fluoroscope without getting any satisfactory results. Prof. Geo. E. Gordon came into the consultation and we decided that the main source of the lesion on which the epilepsy depended was probably in the immediate vicinity of the hand center of the cerebrum on the right side. There were surely evidences of something wrong with the gray cells in that region, as indicated by the paresis of the left thumb and finger.

Thrusting itself boldly into the case was a paresis of the left facial nerve which I have before hinted at. It complicated the work of locating the lesion but was finally attributed to the effect of a vascular meningitis which appeared as a perverse incident of the inflammation and abscess which appeared about a week after the gunshot wound occurred. The facial palsy was not noticed until the abscess was opened; it improved somewhat, as did the hemiplegia, after that event.

On August 8 he was given chloroform. His hair was carefully clipped and the right side of his head was shaved. I made a horseshoe flap, exposing the bone over the middle of the fissure of Rolando. Then the trephine was applied and a button of bone three-quarters of an inch in diameter was removed. It was quite adherent to the dura mater. Pulsation of the cerebrum was felt through this opening to be quite feeble and indistinct. With a rongeur the opening was enlarged to a diameter of two inches in an anterio-posterior direction and one and one-half inches in a superio-inferior direction. The dura was exposed in the bottom of the wound. It included much scar tissue and was blended with arachnoid and pia so that it was quite impossible to distinguish one from the other. This scar tissue continued beneath the skull in the direction of the bone scar that marked the wound of entrance of the ball. Four incisions were made cautiously through the fused membrane to the brain cells beneath, embracing a part of the scarred dura mater in a direction transverse to the longitudinal diameter of the scar and parallel with each other, for the purpose of inducing a healing with tissues that would be more favorable to the nutrition of the brain-cells.

Recovery progressed favorably, the wound healing promptly. The weakened arm and extremities are now, four weeks after the operation, greatly strengthened.

46 Adams Avenue West.

A TRIBUTE TO DR. VAUGHAN.

On the occasion of the twenty-fifth anniversary of his doctorate, Dr. Victor C. Vaughan, of the University of Michigan, was made the recipient of a memorial volume of contributions to medical research which must have proved an exceptionally pleasing testimonial. The volume consists of twenty-four articles on medical research work, written by colleagues of Dr. Vaughan and by former students in the department of medicine and surgery in the University. The book is a handsome one, and contains some extremely interesting contributions to medical knowledge. A pleasant feature of this testimonial is that the work has been issued in such numbers as to make it quite well-spread throughout the country, where alumni of the department are now practicing, and viewed from the general standpoint of approval for that which makes for exact knowledge must command more than passing interest and attention at the hands of the profession as a whole. Dr. Vaughan's own work in the department has been so well known for years that he has been a familiar figure in the history of medicine, and this testimonial on the part of the men and women who have worked with him and under his guidance has all the qualities of sincerity and appreciation which should make the man to whom it has been dedicated feel deeply touched and honored.

Lewis Stephen Pilcher, editor of the "Annals of Surgery," has the first article, on "Operative Possibilities in Carcinoma of the Breast." He reviews briefly the literature and the history of this division of surgical work, and goes on to point out the absolute necessity for surgical interference in every case of even suspected carcinoma of the breast, unless there is some strong contraindication. He lays the responsibility for the existing hesitancy and fear of women to undergo a necessary operation to the startlingly high mortality and low ultimate immunity from recurrence in the last generation. He states confidently that as knowledge of what has been done and what can be done in surgery of the breast grows among victims of cancer of that organ less hesitancy will be displayed by them in undergoing operation, and the proportion of permanent cures will be increased.

Franklin P. Mall, of Johns Hopkins, contributes an important addition to his account of three years ago, when he presented comments on fifty-three pathological ova. Since that time twenty new specimens have been added to his collection and he has been able to secure practically all the stages of development of the embryo. From his studies of seventy specimens, he draws the following conclusions:

Destruction of the embryo may take place quite rapidly in the young ovum, and the cause probably lies in the ovum itself, for the chorion is usually normal. Changes in the chorion may be regarded as secondary. Under this heading are three divisions—in which the embryo is not formed at all or is entirely destroyed in the young ovum; where it is destroyed during the end of the second week, leaving only the umbilical vesicle; or where the embryo is destroyed after the amnion is well formed, leaving only the umbilical cord.

Primary changes in the chorion may cause strangulation of the embro, which is followed by a variety of pathological changes. Grouping these under two heads, they are found to be those in which the strangulation causes complete arrest of the development of the embryo; and in which the strangulation only delays the embryonic development. An interesting description of the specimens is given.

Henry Sewall, professor of physiology in the Denver and Gross College of edi-

cine, has a short article on "A common form of reduplication of the first sound of the heart, due to extra-cardiac causes," and Herbert U. Williams and Frederick C. Bush, of the University of Buffalo, have collaborated on a valuable paper on the lymphomatous tumors of the dog's spleen. An article of interest is one by Edmund Andrews, late professor of surgery, Northwestern University, on "The Aboriginal Physicians of America", and William H. Howell, of Johns Hopkins, writes a paper on the cause of shock and effect on it of injections of solutions of sodium carbonate, which contains a number of new and interesting points.

Paul C. Freer and Frederick G. Novy, of the University of Michigan, contribute an exhaustive paper on the organic peroxides, with especial reference to benzoyl acetyl peroxide, which is particularly timely, owing to the great interest which is taken in this drug as a means of treatment in cholera, dysentery and typhoid fever. Cancer of the gall-bladder and biliary passages forms the subject of a paper by William J. Mayo of Rochester, Minn., and John J. Abel, of Johns Hopkins, writes of the function of the suprarenal glands. His paper, especially after the recent writings of Dr. Charles de M. Sajous, is of importance in establishing the function of the ductless glands. Rueben Peterson, professor of gynecology and obstetrics at the University of ichigan, presents a consideration of ovarian fibromata based on a study of two causes that have come under his own observation and eighty-two from the literature.

The morphology of the pyloric glands in vertebrates forms the subject matter of a paper by Lydia M. DeWitt, of the University of Michigan, and Richard Dewey, of Wauwatosa, Wis., gives an inquiry into the mental states of anarchists. Splenectomy and the changes produced by it in the hemolymph glands of the sheep and goat is the topic discussed by Alfred Scott Warthin, of the Universiy of Michigan, the article being illustrated with a number of reproductions of microscopic plates of the tissues after autopsy. The aeration of milk is the subject of a carefully written and well considered paper by Charles E. Marshall, of the Michigan Agricultural College, and Charles B. Nancrede, of the University of Michigan, makes a brief report on the relations of the law of physics to the lodgement and deflection of modern small-arm projectiles. Dr. Nancrede does not hold at all with the richochet hypothesis, believing that this is an inadequate explanation for the effects of wounds, and certainly his experience on the field during the Spanish War gives him abundant cases from which to make deductions.

An article of unusual practicability and value is one by Warren Plimpton Lombard of the University of Michigan, on an unusual subject—a consideration of the tendon action and leverage of the two-joint muscles of the frog's hind leg, with special reference to the spring movement. The author makes a careful and exhaustive review of the literature on this head; and adds interest to the text by the presentation of a number of diagrams carefully designed to show exactly the effect of the motions of the frog's hind-leg, both active and passive. In his experiments Prof. Lombard made use of a number of devices for measuring the leverage of the muscles, and their use is carefully explained. A number of curves are plotted to show the leverage on the knee and on the ankle, and a comprehensive knowledge of what is now known regarding the action of the leg may be gained from a careful reading of this article.

Clarence A. Good, of Columbia, Mo., writes of the action of lithium, and a full article is contributed by Arthur R. Cushny, of the University of Michigan on the secretion of urine and the saline diuresis. The diuretic action of alcohol is the sub-

ject chosen by W. Edmonds, of the same university. He has secured some interesting data, but his experiments fail to determine whether or not alcohol has a specific action on the epithelium. The well known habit among women of the lower classes of taking nutmegs to induce labor gives added interest to a short paper by George B. Wallace, of University and Bellevue School, New York, on "Nutmeg Poisoning."

G. Carl Huber, of the University, has been active in research work, and has devised some useful means of securing wax plates for the study of sections in morphology. In collaboration with Edward William Adamson he has written a contribution on the morphology of sudiparous and allied glands, which presents many valuable features. It is profusely illustrated. Charles S. Gorsline, of the University contributes a short article on the preparation and use of collodium sacs, and this is followed by an able paper on the phylogeny of the forearm flexors by James Playfair McMurrich, of the University faculty. Prof. McMurrich comments on the fact that although considerable work along this line has already been done by Ruge, Cunningham, Leche, Von Bardeleben, Eisler and others, numerous important questions have not been taen into consideration, notably that of forms among amphibia and reptilia, and forthwith proceeds to a discussion of these matters. In an extended article he sets forth the results of his studies, and fills in many of the gaps left by former investigators. His work is an important contribution to the general subject of phylogeny, and should be given a high place in the literature.

A number of clinical reports on cases of acquired and congenital transposition of the viscera form the body of an article by James Rae Arneill, of the University, who presents a number of photographs, and Robert C. Bourland, of the same institution, presents a short but comprehensive study of the superior sphincter of the rectum. Brief articles by W. H. Morley and George B. Pray, both of the University faculty, are followed by an extended paper by Wilbur P. Bowen on the pulse rate in man as modified by muscular work. A number of tables present much important information in convenient form, and records of the sphygmograph furnish additional interest. Frederick A. Baldwin, of the University's pathological laboratory, has written a complete short article on the presence of yellow elastic tissue and reticular tissue in tumors of the skin, and Moses Gomberg, of the chemical department has an excellent technical paper on triphenylmethyl.

Frances Nichols Boynton, of the pathological laboratory, presents an interesting case of a malignant tumor in a domestic fowl, and a report of an attempted transplantation. Another case of interest, one of idiopathic myositis involving the extraocular muscles, is furnished by John Elwin Gleason. Frederick G. Novy, in collaboration with his assistant in the department of bacteriology, Ward J. McNeal, is author of a paper on the cultivation of trypanosoma Lewisi, and the volume concludes with an extended article by G. Carl Huber on studies of neuroglia tissue.

The whole work, representing as it does the interested and conscientious work of a number of earnest students of medical research, forms a testimonial of which any man might well be proud. It is a fitting tribute to Dr. Vaughan.

Bay City business men are protesting against the extravagance of the board of supervisors in taking care of small-pox cases. From January 25, 1901, to August 25, 1903, the total paid out amounts to a little under $40,000, some individual physicians having drawn as much as $4,800 in that time. A strong demand for retrenchment is being made on all sides.

DETROIT MEDICAL JOURNAL

A MONTHLY EPITOME OF
PRACTICE AND THERAPEUTICS

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The Question of Fees.

In the case of a surgeon suing to recover for professional services, a Michigan circuit judge recently charged the jury as follows:

"The right of a doctor, a lawyer, or any other professional man to fix compensation according to the ability of the client or the patient to pay has been raised in this case, and the law says you have a right to take into consideration a man's ability to pay. I charge you that the law is that the patient's ability in this regard cannot be considered in fixing the amount of compensation for any man's services under any circumstances greater than those services are actually worth.

"One important thing to be taken into consideration is that in the last few years antiseptic methods have greatly decreased the difficulties and dangers surrounding surgical operations and consequently the value of such services has decreased."

This is a surprising declaration, coming from a man who for years was a practicing attorney and charged his clients for legal services according to their ability to pay upon his own estimate of what his services were worth. A man owes to the clergyman who marries him a fee commensurate with his financial circumstances and the graces of the bride, to the lawyer in proportion to the magnitude of the property interests at stake and to the doctor in accordance with the responsibility involved, both financial and social, the gravity of the illness or operation and the skill and standing of the practitioner.

This has always been the custom in medicine, and we fail to see how it can be improved upon.

A fixed scale of charges is impossible because the circumstances vary in every individual case. No balance can weigh accurately the value of human life, either to the patient, or to the community. Even the poor man loves his wife or child and values their lives or his beyond the power of money to pay, but his small income and urgent necessities preclude a charge from the doctor, except on a humanitarian basis, hence his bill is always a discounted bill based, not on the value of the services, but on the patient's ability to pay a little. To the rich man, on the other hand, life is all the sweeter by reason of the comfort of his surroundings and freedom from care and toil, hence he should be and usually is, willing to pay for the professional care which safeguards the lives of himself and family on the same generous basis as that of his other expenditures. In the main medical and surgical fees are too low rather than too high, and although involving the responsibility for human life are in no way commensurate with the attorney's fee, where nothing but money is at stake.

In a case in which the writing of a few letters to a great corporation secured the payment of $30,000 to the client, the attorneys modestly took $3,000 and paid over the balance; yet the same attorneys would doubtless contend that the same

fee was exorbitant for an operation which saved the life of a man worth $30,000.

So far as we know, the largest surgical fee paid in this state is $5,000 for a successful major operation in the family of a multi-millionaire, and yet any good attorney would charge that or more in a suit involving much less than a million.

So we conclude that the physician or surgeon is entitled to expect recompense in proportion to his skill and reputation and the responsibility involved in exact ratio to the ability of the patient to pay therefor. The failure of a physician to save life in no way lessens the responsibility or the value of services rendered, so long as ordinary skill and care has been given the patient, although it is often customary to make the burden lighter for the family by a rebate in charges.

We cordially disagree with the erratic contention of the judge that improved antiseptic methods lessen the value of surgical work to the patient. As well say that a ride on the old horse car was worth more than on the modern electric car because the improvement in transportation lessens its value to the passenger. Modern surgical antiseptic technique renders surgery of more value than formerly to the patient, because it offers him more certainty of cure with shorter period of disability and less hazard of life than ever before.

American Medical Journals

Certain of our exchanges in discussing the future of medical journalism seem to fear the growing power of the Journal of the American Medical Association, seeing therein a menace to the existence of the smaller journals. For example, The Wisconsin Medical Recorder, under the heading "A Medical Trust," recently said:

"The American medical profession is proud of its great society, the American Medical Association, but there are criticisms in the air which indicate a growing dissatisfaction which will weaken the society. The association is really controlled and managed by a small coterie of men. Recently it appeared that they were managing the association for their own personal benefit and this is something, which, if continued, will not be tolerated in this country. The lack of interest in some of the smaller societies is due to the fact that the few run them without allowing the majority a voice. The tendency of the American Medical Association is to make it subordinate to a great publishing business conducted for the benefit of a few. The American Medical Association should be primarily a great scientific body, and not be devoted to commercialism. Dr. J. C. Culbertson, editor o the Cincinnati Lancet-Clinic, says in an editorial commenting on the banquet of the American Medical Editors' Association at New Orleans:

" 'The writer is tempted to make mention of an incident, perhaps excusable and perhaps not. The incident thought of was the absence of the editor of the association journal or of a representative. A self- assume representative, in responding to a toast, took occasion, foreign to his subject, to thank the independent medical journalists for the aid and assistance rendered from time to time by them to the association journal, and asked for a continuance of good-will and fraternal fellowship. This expression was received with solemn silence, and why should it not be so? There was certainly no concert of action on the part of the independent journalists in the matter, but there was evidently a common feeling of dissatisfaction with the course of that publication. Evidently, a line has been drawn and the foundations of a wall erected which has for its intent and purpose a future antagonism of the association journal. There was not much outspoken feeling expressed, but mutterings and murmurings of discontent passed around from one to another.'

Dr. E. C. Register in an editorial in the Charlotte Medical Journal, says:

"'As a member of the American Medical Association I don't believe that it would be amiss or improper in any sense, or an injustice to anyone, to say that the Journal of the American Medical Association should not be the greatest advertising medium for proprietary medicines in this country. As long as this policy of the journal prevails evidences of prejudice against it will be in evidence. When they make the advertising of the proprietary medicines an insignificant feature of the journal, or better still, do away with it altogether, then, and not until then, will the name of the association journal create a different murmur from that described by Dr. Culbertson, or cause the applause that it, in many ways, deserves. I believe that a policy of this kind would be a help to the journal's great editor and his proficient assistants and enable them to do better and more acceptable work.'"

There are about 300 medical journals published in this country, which divide themselves into two groups, those published solely or largely in the interests of proprietary medical or other drug houses and those which are ethically clean and working for professional rather than commercial interests. While the line of demarcation is not as clear as it should be, still the bulk of the profession can distinguish the clean from the unclean. The Journal of the A. M. A., the various state journals and some others are owned and controlled entirely by the medical profession, and should, and we think do, represent the highest type of medical journalism, although many of these are capable of improvement in the class of advertisements printed. The rule of the A. M. A. that its journal advertise no compound without an intelligible formula with it is worthy of more strict enforcement, inasmuch as many other journals restrict their advertisements to those acceptable to the A. M. A. journal; but we fail to see why the growth of the association journal should cripple independent journalism, so long as its advertising rates are maintained in proportion to its increasing circulation.

The Journal of the A. M. A. is free to members of the Association, among whom mainly it circulates, and every man is willing to pay for a number of other journals of a more or less local character or appealing directly to his special needs. In point of fact but few of the good journals of the country are national in character or in circulation; most of them typify the work of localities or states, and have their own field, limited, to be sure, but no less important; and they have more to fear competition from journals of their own class than from the big national weeklies.

As for ourselves we shall publish an up-to-date practitioners' monthly, ethecally clean always, so long as we have the support of the profession in our neck of the woods. We are striving to make it worthy a place on the table of every medical man who reads anything.

Now is the time to subscribe!!!

PUBLIC SCHOOL HYGIENE.

In its August issue, the Bulletin of the American Academy of Medicine presents a well considered symposium on the subject of public school hygiene by six authors, among them Dr. Victor C. Vaughan, of the University of Michigan. Since the strong words of Herbert Spencer (who could always be trusted to speak strongly and to the point on any topic that affected the health and happiness of childhood) touching this same matter, there have been intermittent attacks made on the policies of educational boards in general, looking to an improvement in the methods of instruction in simple personal hygiene. A glance at current literature would seem to show that there is need for a more concen-

trated and purposeful effort on the part of parents and the medical profession to secure better instruction for school children in hygienic matters. Schools are built with the latest and most improved and approved plumbing, heating and ventilation; many portions of America may be said to be extremely well fitted with schools in which the conditions surrounding the children are abundantly healthful and to be recommended. But it must be remembered that school children pass but a comparatively small portion of their time in the hygienic school-room and that many of them spend a greater part of it in an environment that is scarcely to be called healthful. The greatest efforts of the boards of health cannot secure individual hygiene at home; it is for the teachers to do their utmost to further in the schools the dissemination of knowledge in the simpler and more essential matters pertaining to individual health and care.

There are many reasons for this, not the least of which is the fact that the children of poor and ignorant parents, and the parents themselves are apt to lay some stress on what "teacher" says. It is true that many parents are prone to regard any hygienic suggestions, from whatever source, as impertinent and interfering. Nevertheless, teachers may do much toward instilling some right ideas of healthful living into their little charges; and the very fact that they meet with opposition in the homes of the pupils should be an additional spur to further efforts.

The system, which has been widely tried, of teaching children from little text-books, of which each child has one, has many faults. One of the chief difficulties encountered is the character of the books themselves. How many of us remember the chronicle of Alexis St. John, whose stomach had been torn open by a gun-shot wound and "healed" in such a condition "that the doctor could look into his stomach and see what was going on inside?" The moral of the story, however potent it may have been in some cases as a warning against the use of alcohol as a beverage (to which St. John appears to have been more than somewhat addicted), is marred in the misleading nature of the text. This is but one instance of the injurious nature of the subject-matter of the school text-books on hygiene. An author in the symposium mentioned, Dr. George G. Groff, of Lewisburg, Pa., speaks of others. Among other cheerful statements, he mentions the following: "Cider drinkers are peculiarly crabbed and cross;" "Sour milk is unwholesome;" "Pork is a meat not fit to eat;" "*Frequently* the weakened walls (of the heart) burst, causing instant death;" "Those muscles which are most used become *longest* and strongest," and so on, *ad nauseam.*

As against the misleading and often untrue statements of books, the fitness of which is only too often decided upon by text-book committees of school boards having members almost wholly without definite ideas of the value of such books, there is another means of instruction, in which the children are taught simple and wholesome *truths* by the teacher, *viva voce.* There are many advantages for this system, always supposing that the teacher is competent to teach properly. For the purpose of securing competent teachers, what is more natural and appropriate than that school teachers should themselves receive expert instruction in these matters? It is not too nearly approaching a Socialistic statement to observe that it is always to the best interests of a community to preserve the health of its younger members by every means in its power. The maintenance of health among school children is a thing the importance of which can scarcely be overestimated. There is a persistent cry

of "fad" raised whenever any innovation of any kind is about to be made in the curriculum of our public schools. Yet many and necessary improvements have been made over the school conditions of a quarter of a century ago. Other countries give attention to these conditions, especially the Anglo-Saxon countries; seeing that education is compulsory to an extent in America, it would seem well that children, once in school, should be taught how to properly care for themselves out of school hours. This is especially true in this country, where public school children come from all sorts and conditions of families.

The establishment of a department of hygiene, such as is a part of the public school system in some parts of the country, is an excellent thing. Dr. Helen C. Putnam, of Providence, R. I., gives an interesting picture of the proper conditions under which such a department should flourish, in her paper in the symposium. It may be said in passing that her ideal seems almost too high to admit of attainment, although the qualifications of the head of such a department must be numerous and extraordinary. A man at the head of such a division of the school work must be a trained physician, with plenty of patience and an abundance of common sense; he must be possessed of tact and magnetism, those two elusive qualities which make or mar the success of many a man; and he must have an immense capacity for hard work.

The medical profession of America can do much toward the securing of such men for such positions; and if America can place the department of hygiene in her public schools on a rational and satisfactory basis, she will have taken a long stride in advance in educational matters. And it may be added, that such a step would be to take the lead in this matter, for in no country to our knowledge is there a department of hygiene in the public schools which is doing excellent work.

EDITORIAL NOTES

At the Annual Commencement of Columbia University, held June 10, 1903, President Nicholas Murray Butler, in his address, referred to the College of Physicians and Surgeons in the following manner:

"The alumni will be glad to hear, I am sure, that during the year that has closed, both the medical faculty and the trustees have given long and anxious thought to the pressing needs of the College of Physicians and Surgeons. This great institution, so long the pride of the medical profession in this city and an ornament to the city itself, has, like the university as a whole, suffered because of its very success. The number of students crowding its doors has become larger than its lecture halls and laboratories can contain; its curriculum has needed readjustment in order to be fully abreast of the most advanced medical education of to-day, and its clinical facilities are in need of constant extension in order that its opportunities to teach and to demonstrate may keep full pace with the practical demands of the physicians of to-morrow.

"The faculty, after careful thought and consideration, have adopted and put in operation a new and thoroughly revised curriculum, which uses much of the time heretofore devoted to didactic lectures, for increased amounts of laboratory work in the sciences ancillary to medicine and surgery, and for additional practice instruction in the appearance and treatment of disease in dispensaries and hospitals.

"Similarly, great advance has been made in the development of the clinical side of the study of medicine. The Vanderbilt Clinic becomes more important each year and its work better organized.

So long as the university is without a hospital of its own our medical school must depend on the good will of the trustees of other institutions. We are fortunate in commanding for our students certain valuable privileges in the leading hospitals of New York, but the time is not far distant when, to equip the university properly, the medical school must build and control a hospital of its own. In foreign universities the greatest medical schools command their own hospitals, and the striking success of the medical school of the Johns Hopkins University has been due in large part to the fact that a modern hospital was under its own immediate control.

"Furthermore, we are to have for the first time a reference library for students at the medical school.

"With the raising of the standard for admission to the medical school, it is expected that there will be in the autumn a falling off in the number of students making application for admission. There will be a constant raising of the standard for admission, to be followed at once by a raising of the standard of the teaching in the institution itself. Large sums of money must be at hand before the ideals of the faculty and of the trustees can be in anywise reached in this extremely important branch of the university's work."

The experiments of Dr. W. B. Cannon, of the Harvard Medical School faculty, along the line of watching the action of digestion by means of the X-Ray and a screen, have attracted considerable attention. Dr. Cannon has been interested in this subject for a number of years, and he has had remarkable success in demonstrating with the apparatus he uses the visible presence of what was theoretically determined some time ago by scientists—the kneading action of the stomach in the digestion of food. Dr. Cannon utilizes the cat as the subject of his experiments, the animal being lightly secured to a plane surface with the tube underneath it and a screen above. The cat is given no food for a period of twelve hours and is then given a hearty meal of bread and milk, with which is mixed a large dose of subnitrate of bismuth. This makes the food partially impervious to the passage of the rays, and in this manner the shadowy outline of the stomach filled with food may be projected on the screen above the animal that is being observed. Wave-like undulations, starting near the circumference of the stomach and progressing toward the pyloric end have been noted, recurring at 10-second intervals; and in one cat under observation the number of these waves reached 2,600 during the period of digestion. A new matter of knowledge was brought to light by these experiments—that these undulations extend over only about one-half of the stomach-surface, and that the stomach itself during digestion is divided into two portions, one acting as a reservoir for food and the other as a place in which the food is digested. The action of the pylorus was also accurately noted by the observers.

In another series of experiments pellets of food were well mixed with subnitrate of bismuth and the process of their digestion noted. Here the process of digestion was slower, and it was observed that the solid particles of food several times approached the pylorus, and were rejected by it, being sent back to the center of the stomach for further digestion before they could pass into the intestines. It was also observed that any emotion like fright or anger manifested by the cat had an immediate effect in impairing the digestive process.

A number of useful corroborations were made by these experiments, and they may be said to have combined real scientific value with more than ordinary interest.

The following basis for reciprocal medical registration has been resolved on by the confederation of boards:

(a)—That a prerequisite to reciprocal registration, the applicant therefor shall file in the office of the Board of the State of which he is a licentiate such evidence as will enable the said board to certify that he is of good moral and professional character.

Such certificate shall be filed with his application for reciprocal registration in another State.

QUALIFICATION NO .1

(b)—That a certificate of registration showing that an examination has been made by the proper Board of any state, on which an average grade of not less than 75 per cent. was awarded, the holder thereof having been at the time of said examination, the legal possessor of a diploma from a medical college in good standing in the state where reciprocal registration is sought, may be accepted, in lieu of examination, as evidence of qualification. Provided, that in case the scope of the said examination was less than that prescribed by the State in which registration is sought, the applicant may be required to submit to a supplemental examination by the Board thereof in such subjects as have not been covered.

QUALIFICATION NO. 2.

(c)—That a certificate of registration, or license issued by the proper Board of any State, may be accepted as evidence of qualification for reciprocal registration in any other state. Provided, that the holder thereof was, at the time of such registration, the legal possessor of a diploma issued by a medical college in good standing in the State in which reciprocal registration is sought, and that the date thereof was prior to the legal requirement of the examination test in such State.

A meeting of the American Confederation of Reciprocating Examining and Licensing Medical Boards will be held at the Southern Hotel, St. Louis, Mo., on October 27. Dr. Beverley D. Harison, of Sault Ste. Marie, secretary of the confederation, writes that a full meeting may be expected. Regarding the issuance of reciprocating certificates he says:

"They are at this time being issued daily between several of the states, members of and in sympathy with the Confederation, and the executive officers of such reciprocating boards will be present at the meeting and will severally give brief addresses upon "Reciprocity from the Standpoint of Experience in the Interchange of State Licenses." Several eminent medical men throughout the United States not directly connected with medical boards have been invited to attend the meeting and to take an informal part in the proceedings. Among others who have accepted are Dr. Frank Billings, of Chicago, President of the A. M. A.; Dr. William E. Green, Little Rock, Arkansas, Member Committee on Medical Examining Boards, A. I. H.; Dr. Charles A. L. Reed, Cincinnati, ex-President A. M. A., and Dr. Frank J. Lutz, St. Louis, Secretary-General of the World's Congress of Medicine, 1904."

Dr. Philo D. Paterson, of Charlotte, died on September 26 last, of cancer of the throat. He had suffered from the growth since last spring, and failed rapidly from that time until his death. Dr. Paterson was one of the best known and most widely respected physicians in the state of Michigan. Born at Eckford, Calhoun county, on June 8, 1843, he was educated in Hillsdale, receiving his degree of B. S. from Hillsdale college shortly after his return from the Civil War, in which he fought as a member of the Ninth Michigan. He went to the University of Michigan for his doctor's de-

gree, and was graduated from the medical department of that institution in 1869. After a year of post-graduate practice at the Detroit Medical College he began practice at Carlisle, moving to Charlotte two years later. His activity won early recognition, and he played a prominent part in the social and political affairs of his section of the country. He was president of the Michigan State Medical Society in 1900, and served the city in several political capacities, discharging his duties with entire satisfaction to the community. He was a member of the Masonic fraternity, and his funeral was conducted by members of the order. He leaves a widow and two daughters.

Dr. Theodore R. McDonald, of Detroit, died at Harper Hospital on September 14 last, after an operation which was undertaken in the hope of saving his life. Dr. McDonald was born in Southfield, Mich., in 1861, and took his degree of M. D. from the Detroit College of Medicine in 1890. He practiced his profession for ten years in Orleans, Mich., coming to Detroit three years ago. He is survived by a widow.

Much sense is contained in the recently proposed plan of the commissioners of immigration of this country. They want to have immigrants examined for contagious disease before they leave the shores of their native land and take passage on a ship, to spread contagion among the other steerage passengers. Under the present law, the inspectors have the power of returning to their own country all immigrants who in their judgment are a menace to health; but this is altogether too much like locking the stable door after the horse has been stolen. Inasmuch as the steamship companies are required to return rejected immigrants at their own expense, it would seem that they ought to be glad to collaborate in this matter.

According to the annual report of the board of health, 5,171 people died in Detroit during the past year, which is a death rate of about 13.45 per 1,000 population. Of the total number, 1,187 were children under the age of one year, while 1,197 were adults aged 60 or over. It is estimated that one out of every three Detroiters lives to be 60 years old or over. There were 153 deaths due to accident and 63 suicides. There were 12 deaths from smallpox, 60 from typhoid fever, 152 from scarlet fever, 41 from cholera infantum, 338 from consumption, 224 from cancer, 325 from diseases of the heart, etc.

At the thirty-sixth annual meeting of the Canadian Medical Association, held in London, Ont., on August 25th last, the vote for officers resulted as follows: Dr. Simon J. Tunstall, Vancouver, B. C., was elected president; Dr. George Elliott, Toronto, Ont., re-elected secretary and Dr. Henry B. Small, Ottawa, Ont., re-elected treasurer. The next meeting will be held in Vancouver.

In a series of experiments with radium as a germicide, Drs. Pfeiffer and Friedberger, of the Hygienic Institute of Kőnigsburg University, demonstrated that typhoid bacilli on a gelatine plate, exposed for forty-eight hours to the action of radium in a dark room were either destroyed or their further growth impeded. Similar experiments with cholera bacilli showed like gratifying results in sixteen hours, while in seventy-two hours anthrax bacilli were rendered harmless. The practical value of these experiments, so far as treating disease with radium is concerned, is of course questionable. The long exposure required and the strength of the rays from the mineral are serious obstacles in the way of its practical application.

New Instruments & Devices

Mention of new instruments and devices in this department is entirely complimentary and articles illustrated are judged on their merits.

We invite manufacturers and physicians to send us matter suitable for publication under this head. A description of the device and an electrotype or half-tone with a base not greater than two and five-eighths inches should be sent.

Always mention the price of the article in question.

The management cannot undertake to return cuts unless postage for same accompanies the letter with which they are sent.

ANATOMICAL JAR.

This style of jar is designed more especially for containing specimens that are to be repeatedly removed from their container for demonstration, etc., and they are well adapted for this purpose. They are made of extra strong colorless glass, with a cover which overlaps the body of the jar, and fits into a groove around the rim of the jar. This groove is half filled

with glycerine or paraffin oil, and when the cover is placed on top the joint is absolutely hermetical. If it is desired, soft paraffin or beeswax may be used. In this case, pressing down the cover slightly seals the jar air-tight. This feature should be an attractive one to physicians who have occasion to remove their specimens from time to time. The jar can always be opened and closed without trouble; there is no sticking of the cover.

They run in size from 6 x 6 inches to 14 x 8 inches, and range in price from $3.00 to $9.50.

POCKET DIAGNOSTIC LAMP.

Among other advantages possessed by this form of lamp over numerous others is its shape and size. It fits readily into the waistcoat pocket, and is not so thick that it makes an uncomfortably large pocketful. It is light in weight, but

strongly made, and the light it furnishes is as powerful as any we have ever seen from lamps of this general class. A magnifying lens in the top serves to properly focus the light so that the best effects are secured and the lamp is practically heatless. The physician will find it an extremely handy thing to have with him at all times. The battery is a good laster, and when one cell is worn out another may be supplied at a nominal cost. The lamp is sufficiently powerful for the ordinary diagnostic purposes to which it may be put, and we can strongly recommend it.

The price of the lamp, complete, is $1.50, and extra cells cost 30 cents apiece.

PROGRESS OF MEDICAL SCIENCE

MEDICINE AND THERAPEUTICS.

Typhoid.

A careful study of 717 cases treated in the Montreal General Hospital during the six years from 1897 to 1902 inclusive, is contributed by John McCrae (*Am. Medicine*, September 26, 1903). The average duration of the fever period was about four weeks and whole period of illness averaged seven and one-half weeks. The Widal test was tried in nearly all cases and was positive in 92.77 per cent. of cases tried, while the diazo reaction was found positive in 67 per cent. of trials.

Most of the cases were treated by cold baths or spongings, although about 20 per cent. of the milder cases were treated by alternating 4-hour doses of Phenacetin or Salol, five grains each.

The diet was in most cases strictly liquid; in 216 cases semi-solids were given before normal temperature was reached.

Hemorrhage occurred in 72 cases, fatally in 26, and perforation in 43 cases, with 23 operated upon and six recoveries. The diagnostic signs of perforation are not very distinct, but sudden pain was present in half the cases with rigidity and a sudden change in temperature or pulse as valuable indications. The mortality in the entire series of 717 cases was 66 or 9.2 per cent.

Pulmonary Inflammations in Children. Simulating Appendicitis.

Griffith (*Journal A. M. A.*, August 29, 1903), cites cases in which the early symptoms seemed indicative of appendicitis.

Sharp pain in the right abdomen, tenderness with vomiting, and constipation in cases, ushers in the disease. Examination of the chest early is often negative, but in two, three or four days the abdominal symptoms gradually fade and the typical signs of pulmonary consolidation develop. Additional points which may aid in diagnosis are the presence of cough, increase of respiration out of proportion to pulse or temperature, and lessening or disappearance of abdominal tenderness on deep pressure.

Dysentery.

Kayensky (*Rev. de Therapeutics*, 103, No. 5), advocates the use of ice suppositories in the treatment of this disease, slipping them in one after another as they melt until five have been used. Tenesmus readily yields to this treatment, which is repeated from time to time as necessitated by recurrence.

The frequency of the stools rapidly lessens, the general condition is also favorably influenced and recovery soon takes place.

Gall Stone Colic Without Stones.

Krukenberg (*Berlines Klinische Wochenschrift*, July 20, 1903), reports two cases of typical gall-stone colic, recurring periodically, relieved only by morphia. In both cases gall-stones were diagnosed and operation performed, but careful search of gall bladder and ducts disclosed no stones. In both cases the gall-bladder was opened and drained, and recovery followed without recurrence of the attacks.

The writer attributes the attacks to the twisting of the gall bladder and the temporary occlusion of the duct inasmuch as in both instances the attachment of the gall-bladder to the liver was very meager.

SURGERY AND GYNÆCOLOGY.

Ovarian Transplantation.

Franklin H. Martin (*Chicago Medical*

Recorder, July, 1903),reports the following two cases in detail:

Case 1. In a woman of about twenty-nine years both appendages had been removed for dysmennorrhea, but upon learning that both ovaries had been removed she was horrified because engaged to be married and began to look for a surgeon who would transplant other ovaries into her pelvis. Two years later the author performed on her the following operation: The remains of the fallopian tubes were reconstructed so as to form two pervious oviducts. Incisions were made at both angles of the uterus, and the endometrium stitched to the peritoneal cover. Then the broad ligament was split beneath the end of the amputated tube. To the denuded area a portion of an ovary, taken from another patient, was sutured, the same procedure being carried out on the opposite side of the uterus. The two portions of healthy ovarian tissue, transplanted in this manner, had been taken from another patient in whom laparotomy was performed for an impacted retroflexion. With the patient's consent he transplanted one-third of each ovary from this woman.

Case 2. This same operation was performed on a patient who suffered from the usual symptoms of artificial menopause. She had previously had two laparotomies—one two years previous to this date, in which one of her appendages was sacrificed; another six months later, in which the appendages of the other side were removed.

In both cases the uterus was found atrophied. Both patients made an uninterrupted recovery. At the time of the report, nine and five months, respectively, had passed since the operation. Menstruation had not reappeared, discharge of mucus, however, was observed at intervals of about four weeks. Both patients complained of attacks of rather severe pain, occurring about once a month. The writer considers his results satisfactory and promising. In his opinion this new operation will make it possible to relieve, in a large number of cases, the nervous symptoms following premature menopause, and demonstrates the possibility of re-establishing the menstrual and child-bearing function in women who have been obliged to sacrifice their ovaries and tubes.

Operations Upon Diabetic Patients.

Noble (*American Medicine,* September 26, 1903), discusses the advisability of operating upon diabetics, and tabulates sixty-nine cases of abdominal and gynæcological operations, with nine deaths from coma, and eight from other causes. A careful study of the reported cases would indicate that the ratio of deaths from other causes than coma was not extremely high, and that the patients recovering convalesced normally, the wounds healing usually by first intention.

When the indications for operation are marked and the amount of sugar in a total daily excretion of three pints of urine does not exceed 2 per cent., we need not hesitate to operate, except for the added danger of coma. The contra-indication to operation is strongest in those patients showing marked constitutional symptoms of diabetes—poor nutrition, loss of weight, intense thirst and morbid appetite.

The Significance of Albumin and Casts in Surgical Patients.

Munro (*Medical News,* September 12, 1903), says that of about 4,000 cases admitted to the surgical wards of the Boston City Hospital during the last two or three years, 500 show albumin and casts, the urine examined being that passed soon after admission. Sixty per cent. of these cases underwent operation, the majority being

of a serious nature; nearly all were etherized, yet there is nothing to show any renal damage resulting from the anæsthetic. He concludes that renal irritation is very frequently encountered in surgical patients, but the presence of albumin with or without hyaline and granular casts unattended by other evidence of renal damage, should not influence the prognosis in surgical disease or operation.

Decapsulation of Kidney.

Blake (*Boston Medical and Surgical Journal*, August 13, 1903), reports five cases operated upon during the past nine months. Two are practically well, one not improved and two have died at intervals of four days and six months after operation. All cases were operated upon simultaneously by two surgeons, each completing the operation upon one kidney.

The diminution of urine following operation is always temporary, disappearing quickly within a few days, usually exceeding the amount previously excreted.

MEDICAL OVERPRODUCTION.

The following statistics, obtained from the report of the Commissioners of Education, shed interesting light upon the increase in medical schools' students and graduates since 1880:

Comparative Table of Medical Colleges.

Year.	Regular.	Homeo-	Eclectic.	Phys.-Med.	Total
1880....	72	12	6	..	90
1890....	93	14	9	..	116
1900....	121	22	8	..	151
1901....	124	21	10	4	159
1902....	121	20	10	4	155
1903....	121	19	10	4	154

Table of Medical College Attendance.

Year.	Regular.	Homeo-	Eclectic.	Phys.-Med.	Total
1880...	9,776	1,220	830	...	11,826
1890...	13,521	1,164	719	...	15,404
1900...	22,710	1,909	552	...	25,171
1901...	23,846	1,683	664	224	26,417
1902...	24,878	1,617	765	241	27,501
1903...	24,930	1,498	848	339	27,615

Table of Medical College Graduates.

Year.	Regular.	Homeo-	Eclectic.	Phys.-Med.	Total
1880....	2,673	380	188	..	3,241
1890....	3,853	380	221	..	4,454
1900....	4,715	413	86	..	5,214
1901....	4,879	387	148	30	5,444
1902....	4,498	336	138	27	4,999
1903....	5,088	420	149	41	5,698

Table of Ratio of Colleges to Size of Cities.

City.	Pop.	Schools.	Ratio.
Dallas	42,638	4	10,569
Nashville	80,865	5	16,173
Kansas City...	163,752	6	27,292
Louisville	204,731	7	29,247
Indianapolis ..	169,164	4	42,291
Baltimore	508,957	8	63,619
San Francisco.	342,782	5	68,556
Washington ...	278,718	4	69,679
Cincinnati	325,902	4	81,475
St. Louis.....	575,238	6	95,873
Chicago 1,698,575		14	121,326
Boston	560,892	4	140,223
Philadelphia ..1,293,697		6	215,616
New York.....3,437,202		7	491,029

It is interesting to note the decline of sectarian medicine as shown by these tables.

While the population of the country has increased sixty per cent. and the number of regular graduates has doubled, sectarian medicine has stood still; and consequently the per capita proportion of sectarian practitioners must be considerably less than it was 23 years ago.

Does not this evident disbelief in sectarianism on the part of the young men who study medicine point strongly toward the breaking down of the purely sentimental barriers dividing us into 'pathies?

Ohio's State Medical Board has adopted a scheme of reciprocity with other states, accepting graduates approved by boards of states that will agree to recognize Ohio graduates.

Dr. Z. W. Waldron died at his home in Ann Arbor on the first of the month, as the result of an apoplectic stroke. He was a well known physician, and had practiced in Jackson for 30 years.

The Chicago board of health has begun to enforce the new law requiring the immediate report of all births. The sum of 25 cents is paid to the individual making the report, and the city fathers are beginning to hope that there may be something in the race suicide theory, after all.

It is said that J. Ogden Armour will found a chair in orthopedic surgery at St. Joseph's hospital in Omaha. This is one of the results of the Lorenz visi' to America a short time ago. Daily lectures are planned and chairs in other institutions are to follow soon.

The president of the American Congress on Tuberculosis, to be held in Washington, D. C., April 4, 5, and 6, 1905, has announced Dr. Alfred Meyer, of New York City, as chairman of a committee in charge of the section on sanitarium treatment of tuberculosis. It is probable that the climatic and other methods of treatment will be comprised under the work of this committee.

How well they do some things in Germany! Dr. Weissberger, a prominent surgeon of Frankfort, was severely injured in a railroad accident some time ago, and as a result was incapacitated from the practice of his profession. His claim for damages was passed upon by a German court, which handed down a decision requiring the railroad company to pay the surgeon the sum of 17,000 marks annually during his lifetime.

BOOK REVIEWS

Operative Surgery. By Herbert Wm. Allingham, F. R. C. S., Surgeon to the Household of His Majesty the King, Etc., Etc. Pages, 361. 215 Illustrations. Price Muslin, $3.00 Net. Messrs. William Wood and Company, Publishers, 51 Fifth Avenue, New York City.

In an octavo volume of less than four hundred pages Allingham has condensed a remarkable amount of information. No lengthy descriptions of operations are given, nor does the author attempt to mention all the operations possible, but he endeavors rather to show the more important and necessary points in those methods of procedure which his experience has demonstrated to him to be the best in the various regions of the anatomy.

The text describes the operation in general, and following this description are a number of important memoranda, serving to emphasize the things most to be remembered in the operation under discussion. The work does not assume the tone of a text-book, but is written rather for the purpose of serving as a handy means of quick reference for a surgeon about to perform an operation, and as a hand-book for those who are performing operations on the cadaver or who are watching operations in clinic. The more important aids to operation are mentioned and their use briefly described, but the matter of technique is not considered at great length. For the purpose for which the book is written it is one of the best we know, and we are confident that it will find plenty of use in the hands of the surgeon.

The illustrations are profuse and well chosen, most of them being reproductions from drawings illustrating vital points in some operation.

A Dictionary of Medical Science. Containing a full Explanation of the Various Subjects and Terms of Anatomy, Physiology, Medical Chemistry, Pharmacy, Pharmacology, Therapeutics, Medicine, Hygiene, Dietetics, Bacteriology, Pathology, Surgery, Ophthalmology, Otology, Laryngology, Dermatology, Gynecology, Obstetrics, Pediatrics, Medical Jurisprudence, Dentistry, Veterinary Science, Etc., by Robley Dunglison, M. D., LL.D., Late Professor of Institutes of Medicine in the Jefferson Medical College of Philadelphia. New (twenty-third) Edition Thoroughly Revised, with the Pronunciation, Accentuation and Derivation of the Terms, by Thomas L. Stedman, A. M., M. D., Member of the New York Academy of Medicine. In one Magnificent Imperial Octavo volume of 1224 Pages, with about 600 Illustrations, Including 85 Full-page Plates, mostly in Colors, with Thumb-letter Index. Cloth, $8.00, Net; Leather, $9.00, Net; Half Morocco, $9.50, Net. Lea Brothers & Co., Publishers, Philadelphia and New York.

Old friends of this dictionary—and they are legion—will almost fail to recognize it in its new dress, its abundant illustrations and its lack of obsolete words. The exhaustion of the last edition in three years determined the publishers to produce something out of the ordinary, and they have done it well. The constant activity of modern workers in research, always in new directions, has added wonderfully to the stores of words relating to medicine and surgery. Numbers of words have been coined, only to be dropped, and these have been omitted in the present edition, together with words that bear only very indirectely on medical matters. The Dunglison dictionary has long enjoyed a sterling reputation for the fulness of its definitions, and has indeed been more of an encyclopedia than a lexicon. It has been the object of the editor, Dr. Stedman, to retain this reputation for the book in its present form, and in our estimation he has entirely succeeded. His work as editor of the department of medical terminology for the Standard Dictionary amply showed his qualification for work of this character.

Prof. Leonard Pearson has revised the dictionary and the late Dr. H. H. Burchard has performed a similar office as far as terms in dentistry are concerned. When the thoroughness of revision is realized, the present edition of this well-known dictionary may well be said to be a new book, for it is thoroughly modern and furnished with everything that a thoroughly good medical work of this character ought to have. The illustrations are like the rest of the work in that they are thoroughly qualified for the purpose for which they are designed. We can congratulate the publishers and the editor on the completion of a work which is bound to be successful.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by Hobart Amory Hare, M. D.; Assisted by H. R. M. Landis, M. D. Volume III. September, 1903. Diseases of the Thorax and Its Viscers, Including the Heart, Lungs and Blood Vessels—Dermatology and Syphilis—Diseases of the Nervous System—Obstetrics. Pages 384. Lea Brothers & Co., Publishers, 706-710 Sansom street, Philadelphia, Pa., 1903.

Four times a year this comprehensive review of the progress of medical science comes to our desk, and it is always a welcome visitor, for the busy physician will find much of profit in it. In a brief and condensed form it presents the latest

knowledge on the several departments of medicine and surgery, and always in such a manner that a careful reading will bring a man up to date in his special field. The old order has been followed in the September issue, which is devoted to the subjects mentioned in the heading. The volume is given over to the work of William Ewart, M. D., F. R. C. P.; William S. Gottheil, M. D.; Richard C. Norris, M. D., and William G. Spiller, M. D. In his portion of the work Ewart presents some new considerations on the treatment of pulmonary tuberculosis, together with an extended article on affections of the heart, with special reference to intravenous therapeutics. All that is best of the new ideas is included in his writing. Gettheil again strongly advocates the injection method in the treatment of syphilis, and comments upon the work of Von During in the anti-spyhilis campaign in Asia Minor, instituted by the Sultan, where this treatment is employed. The salycilate of mercury is used, and two weekly injections of from 0.08 to 0.1 gramme (1.2 to 1.5 grains) are given in courses dependent for their frequency on the nature and persistence of the symptoms. Gottheil furnishes a brief account of the injection method, as he uses it.

Nervous diseases form the subject for discussion by Spiller, and he takes up a large number of interesting cases. Diseases of the brain and of the spinal cord are taken up at length and some uncommon cases of disease of the nerves receive attention at his hands. Norris, in his contribution on obstetrics, takes up the question of dietetic treatment in pregnancy, with report of a number of cases; the conclusions are that under the diet laid down births are easier and the offspring more healthful than ordinary. The author also devotes considerable space to considerations of the treatment of eclampsia and the management of abnormal presentations.

A Hand-Book of Obstetric Nursing for Nurses, Students and Mothers, Comprising the Course of Instruction in Obstetric Nursing Given to the Pupils of the Training School for Nurses Connected With the Woman's Hospital of Philadelphia. By Anna M. Fullerton, M. D., Formerly Obstetrician, Gynæcologist and Surgeon to the Woman's Hospital of Philadelphia, Etc., Etc., Etc. Sixth Revised Edition. Illustrated. B. Blakiston's Son & Co., Publishers, 1012 Walnut street, Philadelphia, Pa.

Dr. Fullerton's works on nursing have met with a pleasant reception ere now; her work on surgical nursing has shown her to be a practitioner who thoroughly understands her work, and who has a woman's sympathy with patients. Her work on obstetric nursing has already passed into its sixth edition, which should be a strong indication of the popularity it has already enjoyed among members of the profession. Like previous editions of the same book, the methods of procedure observed in the maternity ward at the Woman's Hospital of Philadelphia have formed a basis for the advice given in the text, and as conditions at this hospital are always progressive, the present edition of the work is brought down to date in a thorough manner. What a nurse most needs to know about the care of a mother and her infant is set down in simple and easily understood language, and one must be dull indeed if a conscientious reading of Dr. Fullerton's work does not give a clear idea of what is necessary to be done and how to do it. A few helpful illustrations are published, showing some of the forms of presentation, the methods of resuscitation, and a number of appliances of use in the lying-in room with which every nurse should be familiar. There is much information and advice—both of them of the kind to

be remembered—in the book; and we can recommend it as filling a substantial place.

A Compend of Human Anatomy. By Samuel O. L. Potter, M. A., M. D., M. R. C. P. London. Seventh Edition, Revised and Enlarged. With 138 Wood Engravings; also Numerous Tables and 16 lates of the Arteries and Nerves. Pages, 356. Price, Cloth, 80 cents, Net. P. Blakiston's Son & Co., Publishers, 1012 Walnut street, Philadelphia, Pa., 1903.

These quiz-compends, of which the volume under consideration is No. 1, have attracted much attention from the profession, owing to the high character of the men who have written them, and the concise and useful nature of the text. In the twenty years that have passed since the first edition of this handy compound was issued, six have made their appearance, each one an improvement on its predecessor, until the present one has been brought to a thoroughly modern state, with the best available information on the general subject of anatomy. While the author admits the value of the numerous text-books on the subject, he feels that any condensation of so important a matter as the study of anatomy in such a manner as to more readily acquaint the student with its most important features is a distinct gain. By means of condensed tables and numerous illustrations he presents the subject in its most important aspects so that a student may be able to grasp the relation of the different portions of the human body one to another and to have a clear idea of the location, nature and function of each.

Owing to the introduction of several new illustrations and the placing of tables in their proper place in the text, the size of the book has been increased by 82 pages, and it is in many respects a new book.

A Conpend of Diseases of the Skin. By Jay F. Schamberg, A. B., M. D., Professor of Diseases of the Skin, Philadelphia Polyclinic and College for Graduates in Medicine. Third Edition, Revised and Enlarged With 106 Illustrations. Pages, 282. Price, Cloth 80 cents Net. P. Blakiston's Son & Co., Publishers, 1012 Walnut street, Philadelphia, a., 1903.

The fundamental principle upon which this series is based—that of collecting the most important and useful information on the subject in hand, and putting it in such shape as to be readily grasped by the reader—is a proper one, and Dr. Schamberg has carefully followed out the object of the series in which his book is a unit. The general subject of dermatology is, of course, a wide one, and needs especial care in writing in a compendious form. Dr. Schamberg's large clinical experience has shown its worth in the careful compilation he has done, and his book contains the meat of the matter in an easily accessible form, for which many students who have read the large text-books on diseases of the skin should be devoutly thankful.

The plan followed by the author has been to take up the question of diseases of the skin in classes; of these he names nine, and a table of classification is printed, which should be of inestimable service in furnishing a lead for the reader. Tables of the differential diagnosis, indispensable in a subject like dermatology, are carefully arranged and valuable. The book has many things to recommend it.

The Skin. Its Care and Treatment, According to the Michaud System. Pages. 225. Size, octave. Price, Cloth, $1.50 Postpaid. The McIntosh Battery & Optical Co., Chicago, Ill.

The writer of this somewhat extensive work modestly conceals his name, but the book merits a careful reading at the

hands of the physician who is pestered by a patient who wants some local treatment for a disfiguring facial blemish, or by individuals who make skin treatment their specialty. In our judgment either a woman has written much of the book or there has been feminine collaboration. It aims at the "open sesame" to beauty, and contains much of interest, even to those of us who believe that we can struggle along without doctoring our faces too much. There are extended directions on the use of the most modern apparatus for the local treatment of the skin, with a description of the best forms of devices for this purpose, and a number of half-tones from life show the methods and the effects. There are some wholesome truths in the volume, and while the local treatment is the thing for which the text is principally written, constitutional treatment is not entirely relegated to he background. Obesity treatment comes in for a large share of consideration, and literally from top to toe the best means of beautifying the human body are considered.

Nurses' Guide to Surgical Bandages and Dressings. By Wm. Johnson Smith, F. R. C. S. Pages, 162. Size, 4⅞x3¾. Price, Cloth, 75c. Philadelphia, The J. B. Lippincott Co.; London, The Scientific Press, Ltd.

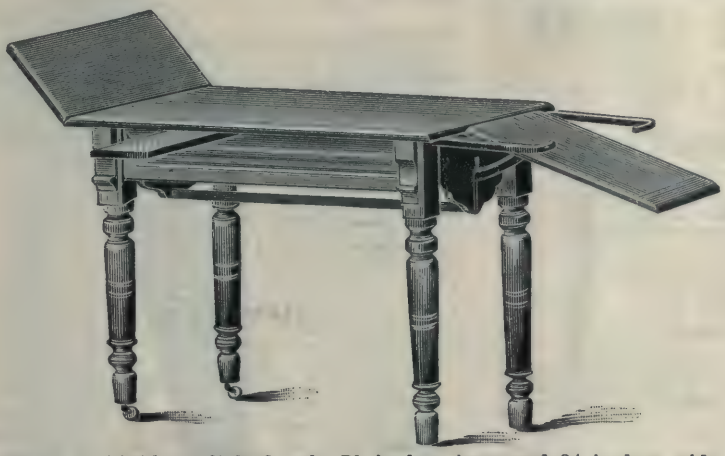
A handy little volume, designed for the use of junior students and nurses in surgical wards. The principles upon which modern scientific treatment of wounds is based are described at some length, and the little volume is copiously illustrated. It should serve admirably the purpose for which it was written.

Germany has again scored a scientific triumph in the discovery of Prof. Raoul Pictet, of Berlin, who is working to perfect a means for manufacturing liquid oxygen on a commercial scale. The syndicate of which he is the head is preparing to supply the town of Manchester, England, with industrial oxygen for lighting purposes. Since 1877, when Prof. Pictet first succeeded in liquefying oxygen, he has been at work on this problem, and he now states that he has practically succeeded in devising a means which will make the commercial production of oxygen possible.

At the convention of the International Association of Railway Surgeons at Indianapolis last month, the following officers were elected for a year: President, Dr. J. H. Ford, of Indianapolis; vice-president, Dr. Weaver, of Yancey,. Mo.; treasurer, Dr. J. H. Duncan, of Cincinnati; secretary, Dr. Louis J. Mitchell, of Chicago. The next meeting of the association will be held in Chicago, at a time to be set by the executive committee.

The insatiable thirst that the Germans have for statistics is evidenced in the report of a medical writer in the Frankfurter Zeitung, who has been figuring out the percentage of different classes of people who have white lines on their fingernails. He figures it out as follows: normal persons, 10 to 11 per cent.; demi-mondaines, 47 per cent.; idiots, 43 per cent.; lunatics, 50 per cent.; criminals, 46 per cent.; periodically dangerous lunatics, 75 per cent. The lines are assumed to denote some degeneracy of the upper nervous system and to be purely physical, but connected with psychical, moral and intellectual changes.

A Berlin statistician has figured out that piano lessons at an early age are responsible for numerous cases of nervous diseases. He estimates that out of 1,000 cases among children, 600 were due to piano practice, but he might have gone further and obtained a higher percentage of nervous wrecks among the people who are compelled to hear childish piano playing.



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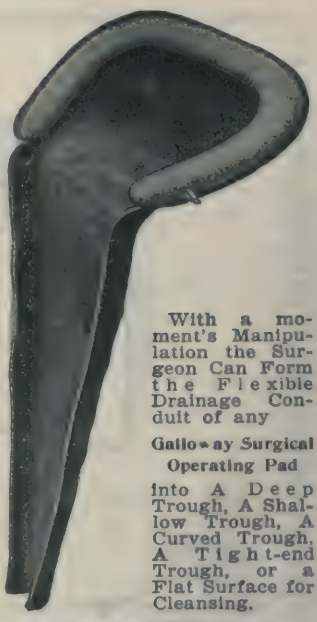

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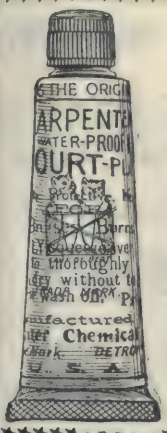

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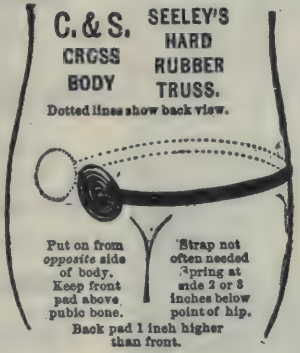
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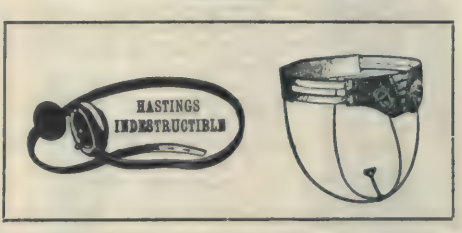

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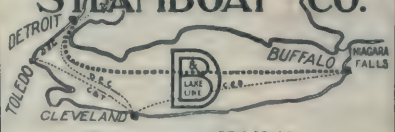

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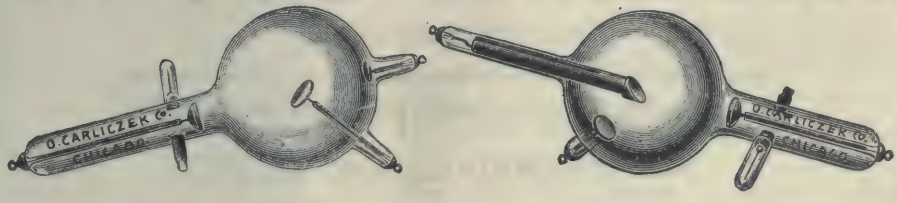

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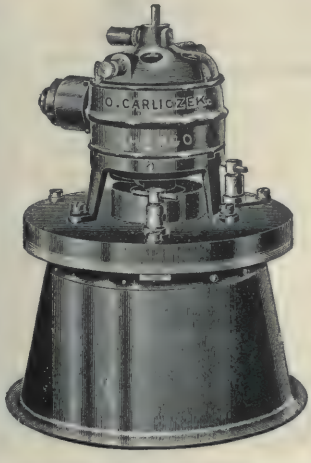

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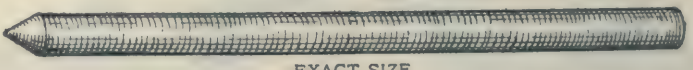

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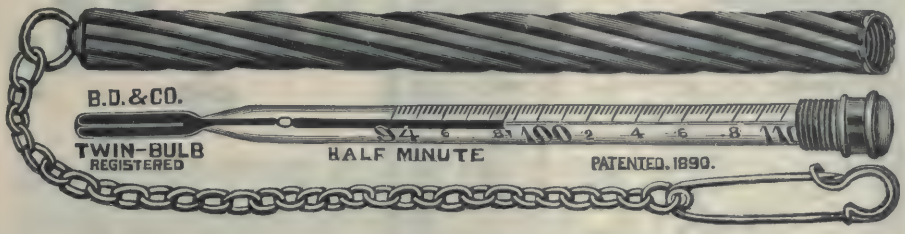

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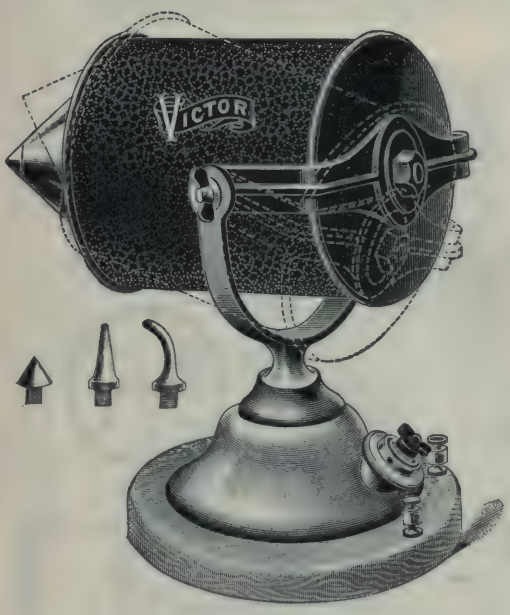

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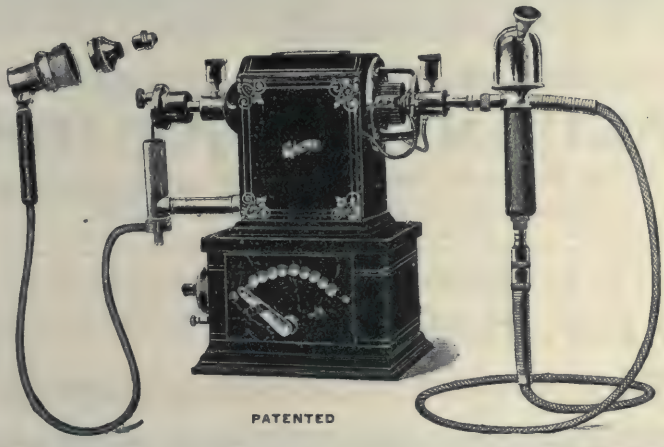

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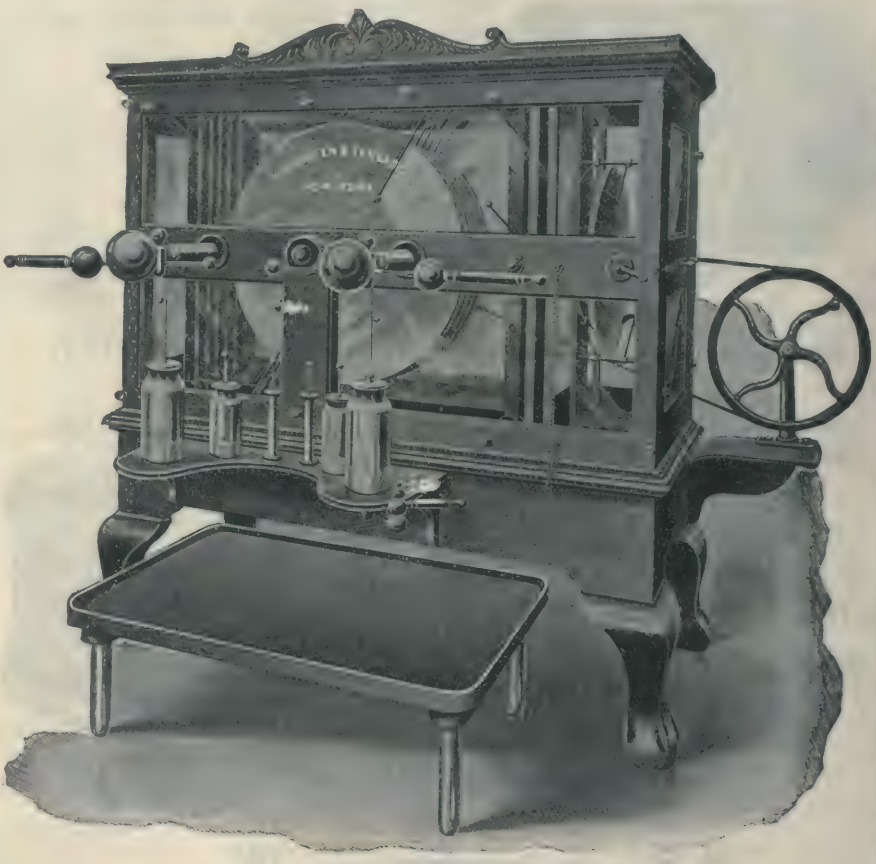

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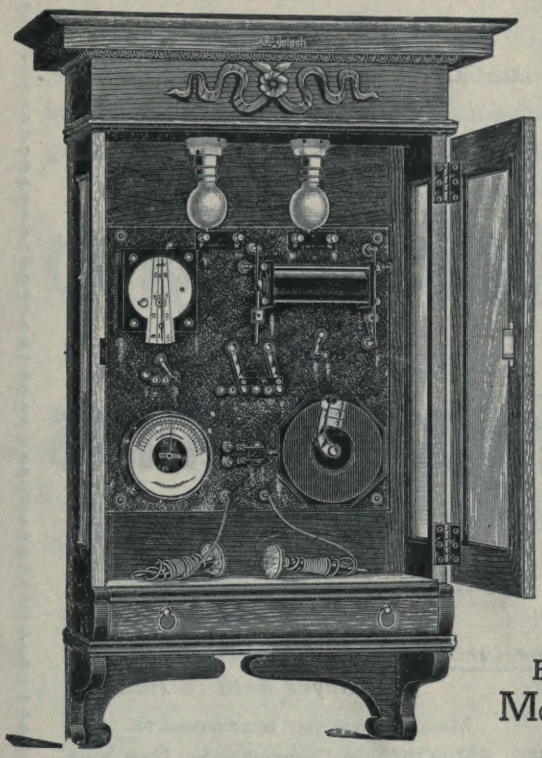

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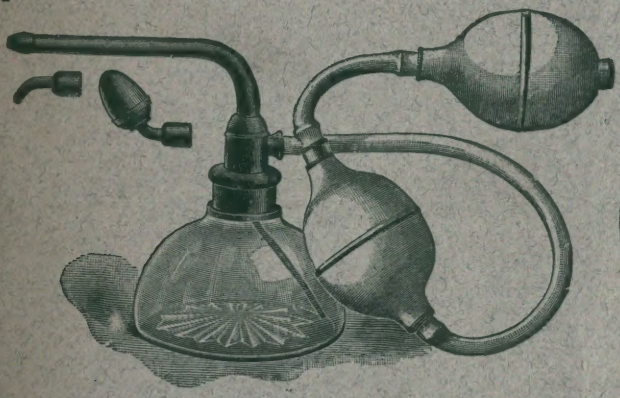

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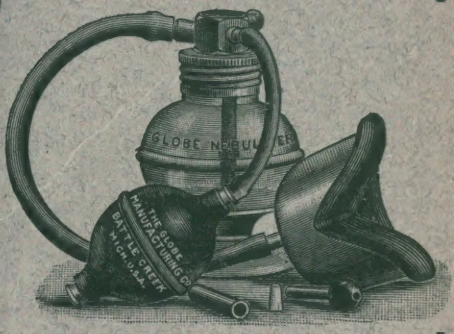

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